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CHARLES BURTON GULICK,	}	EDITORIAL COMMITTEE
CARL NEWELL JACKSON,		
JOHN BRADFORD TITCHENER,		

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RELATIVE FREQUENCY AS A DETERMINANT OF PHONETIC CHANGE

BY GEORGE KINGSLEY ZIPF

INTRODUCTION

BEFORE presenting in detail this investigation, I think that it may not be amiss to give a brief account of its origin and development. Some time ago it occurred to me that a great deal of light might be thrown on the history of the languages of the past by an extensive examination of modern, spoken tongues from a new point of view. It has, of course, ever been emphasized that sound-changes similar to those of remoter times are constantly taking place in the present, and thus affording not only the advantage of more direct observation, but also data otherwise obtainable or suggested only by subjective analysis. As time passed, however, and collateral facts began to accumulate rapidly, the firm outlines of a powerful law of language became ever more manifest, until, after having presented my data to others better qualified in physics, psychology, and biology, I was encouraged to take up the whole question of mutation in language itself. With my *a priori* theory in mind, I accordingly proceeded to collect evidence, pursuing the following course. I argued that, if my theory were valid, it should be demonstrable in modern speech. Upon research in ten modern languages I began to be convinced, to my own amazement and that of my scientific friends, of the validity of my theory. Emboldened by this discovery, I proceeded to consider phonetic and accentual changes in the so-called "dead" languages, Greek, Latin, Sanskrit, and Gothic.

Obviously, the scope of such a thesis will not admit, within the limits of a single article, a discussion of every ramification of the subject. Hence, I have been content to give analyses only of the most salient sound-changes and shifts in accent, for the sole purpose of putting my theory in a clear, definite light before scholars, whose criticism I invite as an aid for future study. None the less, the arrangement of the presentation is such that I believe any reader, at home in Indo-European

philology, can test for himself the validity of the theory in those corollary problems, the full treatment of which in this discussion I have for the sake of brevity been forced to forego.

I should mention at the outset that the cumulative evidence in confirmation of my theory was at times of such embarrassing exactitude that I felt compelled to substitute, wherever relevant and attainable, the results of other investigators, made for quite different purposes. Since the results thus incorporated may not be known in every case to the reader, I consistently give necessary references, and, in cases of delayed publication, add the address of library or author.

Needless to say, in approaching any such problem as that of mutation in language, one is at once beset by *Streitfragen* in the very field of Comparative Philology itself. Since it is my desire to establish the theory as far as possible on incontestable grounds, that it may in turn throw light on unsettled issues, I have studiously avoided treating any extraneous problem the solution of which is itself still quite obscure. Moreover, the new *Gestalt* psychology, which promises to be a boon to philology, I have been obliged, both from its present stage of infancy and from my own ignorance, to disregard almost entirely. But I add here that criticism from no point of view will be more welcome to me than from that of the Koehler-Wertheimer *Gestalt* psychologists.

The presentation of my thesis is intended to begin with the simpler and less complicated sound-changes, proceeding by degrees to the subtler and more delicate.¹

¹ I need not say that the entire investigation, submitted in partial fulfilment of the requirements for the degree of Ph.D. in Comparative Philology at Harvard University, would have been impossible without the friendly aid of others. First of all, I express my greatest thanks to Professor George H. Chase, Dean of the Graduate School of Harvard University, for his continued and strong encouragement, which alone sustained me through many hours of baffling theoretical work preliminary to the investigation of specific, linguistic changes. In gathering the great mass of statistical evidence I was helped considerably by the kindness of Professor Fuchs of the Sächsisches Stenographisches Landesamt, Dresden; Dr. Christian Johnen of Düsseldorf; Mr. George A. S. Oliver of Nottingham, England; Mr. Alexander Iurkovskii, Moscow; Professor Prokop Novák of Prague; Dr. Th. Goluboff, Sophia; the Royal Hungarian Ministerialrat Dr. Rónay Károly of Budapest; S. H. Herr Ludwig von Jakab, Budapest; Signor Cav. Uff. Professore Dott. Giuseppe Aliprandi of Padua; Colonel Olof Melin of Arild, Sweden; and Mr. J. B. Estoup, Paris. I take this occasion to acknowledge my great in-

THE THESIS

Scholars long ago observed that whenever a word, hitherto uncommon, suddenly comes to be frequently used, it is likely to undergo a weakening of form to make it more easily pronounceable. Obvious examples of such weakening are "gas" for "gasolene," "auto" for "automobile," "movies" for "moving-pictures," "how d' ye do" for "how do you do," "good-bye" for "God be with you." A good example in English is the word *Mister* beside the stronger form *master*. These words or expressions not only are weakened in form, but admittedly are in frequent use. It might be argued to the contrary that the word *master* became weakened to *mister* because, in the peculiar use of the latter, the accent was always on the following proper name, thus,

Mister Brówn, Mister Smíth,

and that this accent in turn caused a reduction not dissimilar to that of the Latin:

**Cónfacio* > **cónficio* > *conficio*;

whereas the *a* in *master* was always accented in such phrases as "He's my máster." Very true. Yet here, as in all cases of ablaut, the question at once arises, why did the accent leave *master*, to settle on *Brown*? If we can find an explanation for this simple case, we may see light on a possible explanation of the accentual shift in the Latin **confacio*; for there is no graver problem in all philology than the question why a word, for generations conveniently pronounceable, should for no apparent cause shift its accent.

The case of *Mister Brown* is simple. *Mister* is, as it were, the common denominator of all masculine names; the distinguishing part of the phrase is what follows. The only possible confusion with *Mister* is

debtedness to them. To Professor Joshua Whatmough, of Harvard University I am indebted more than I can say for his patient readiness to discuss my investigation with me, his suggestions of related problems, his valuable criticisms of the rough and finished drafts, and his assistance at every turn of the thesis toward publication. I should express my thanks also to Professors Walter E. Clark and Taylor Starck, also of Harvard University, for their valued comments; and to Mr. Alan N. Holden of the Bell Telephone Laboratories in New York, for his readiness to discuss the phonetic and psychological aspects of the theory.

Miss or *Mrs.*, and it therefore needs no powerful accent of its own. But there are hundreds of possibilities for confusion of the proper name. Hence, if one part should be made more conspicuous by accent, it must logically be this, the proper name. We may say that, as soon as *master* became a frequently used title of address, it was so normal in discourse that it lost its strong accent, so as to cause a weakening in form.

But I should point out here, by way of preface to many examples, that the weaker form is invariably the more frequent form. For example, let us simply take the special case of *mister* and *master*. According to Godfrey Dewey's¹ analysis of 100,000 modern English words, *mister* occurs 148 times, *master* but 13. In other words the weaker form is more than eleven times more frequent than the stronger. Indeed, in hundreds of cases similar to that of *master* beside *mister*, one finds that some weakening of form is ever concomitant with a decided increase in frequency of use.

Moreover, a word both "phonetically" and "acoustically" unfamiliar (that is, from both the speaker's and the hearer's point of view) is seldom if ever abbreviated. On the contrary, it is always distinctly pronounced and often overemphasized. Should one say "gater," few New Englanders would at once think of an alligator; but in the land of alligators such a verbal foreshortening would undoubtedly be at once understood. Indeed, this principle has always been recognized as fundamental in the origin of dialects: different environments produce different cultures, which in turn bring about a different use of words.

The foregoing theory of the inter-dependence of form and frequency of usage I shall now try to demonstrate *a posteriori* with the thesis:

Principle of Frequency. The accent, or degree of conspicuousness, of any word, syllable, or sound, is inversely proportionate to the relative frequency of that word, syllable, or sound, among its fellow words, syllables, or sounds, in the stream of spoken language. As usage becomes more frequent, form becomes less accented, or more easily pronounceable, and *vice versa*.

¹ Godfrey Dewey, *Relative Frequency of English Speech Sounds* (Harvard University Press, 1923), p. 14 and p. 36, column 4.

PART I. SYLLABIC ACCENT¹

(1) All spoken syllables have some degree of accent, which in the stream of sound may be comparatively strong or weak. This accent may lie in the intonation of the voice, in the volume or sharpness of the breath, or in both. In either case it is more conspicuous to the hearer than a weaker accent, and more difficult for the speaker to pronounce. To say that a word, syllable, or sound is unaccented is, strictly speaking, to say that the word, syllable, or sound is not spoken at all; for the weakest utterance must have some breath and intonation. Hence, the problem of accent is but a question of degree from strong to weak.

In listening to spoken language, we notice that, among other things, the speaker invariably emphasizes these two: first, what is new or unexpected to the hearer; second, what the hearer desires to make especially clear. In other words, the speaker under normal conditions does not emphasize what he believes the hearer will be well acquainted with; when the hearer does not understand the casually uttered remark, the speaker repeats, giving his remark added emphasis of distinct articulation, loudness of voice, or definitive explanation. But that which is unexpected, unusual, or unfamiliar to the hearer is, by definition, the seldom. Hence, if any part of the discourse is more emphatically stressed, the words unusual, unfamiliar, or unexpected to the hearer or the speaker will tend to receive this added accent; so too with the everyday familiar words which are frequent in conversation — there is no reason for emphasizing them. Even in written language we avoid unnecessary repetition, believing that it weakens the force or emphasis of the concept. A relationship, then, between accent and frequency is clear.

(2) The parent Indo-European language is said to have possessed a "free" accent, by which is meant that the position of the accent of a word, though fixed, was not — as, for example, in Classical Latin — determined by the quantities of its last three syllables. Nor is it overbold to assume that at a much earlier stage, either before certain suf-

¹ I have examined for this purpose the *Rikṣaṃhita*, Herodotus, Horace, and modern German.

fixes and endings ceased to be individual words, or, after the amalgamation of these suffixes and endings, while they were still richly imbued with their original meanings, the proto-Indo-European felt free to accent that part of the word — the root, stem, or ending — which he chose for the nonce to make more conspicuous to his hearers.

Though this theory is tacitly assumed as commonplace by philologists, for clearness let us give an example from modern English. In the phrase "I've sung," which in Indo-European times might have been expressed by one word, the modern speaker may at his option give greater accent to *I*, or *'ve* (in which case it takes the full form *have*), or *sung*. Nor can anyone deny that the position of the accent in the phrase, which, I repeat, might have been expressed by one inflected word in proto-Indo-European, depends solely upon what element of the phrase the speaker selects for the occasion to make most conspicuous to his hearer.

But in proto-Indo-European times, as in modern, though the option as to the position of the accent remained, one particular order of accent, in a given case, was in fact more frequent in occurrence than any other. In time this more usual or more frequent manner of accenting the elements of an inflected word became the customary way of accenting that word, until finally, through frequent usage, it petrified into the regular and obligatory accent. These various positions of accent we still find to a large extent preserved in the earliest Sanskrit; whereas the resulting vowel-change — what we call ablaut — is everywhere to be observed in the early Indo-European tongues. In other words, tautologous as it sounds, we must see in the Indo-European prefixes, suffixes, and endings, elements of language, although joined in speech, yet individualized enough in sense to draw upon themselves the chief accent of the word whenever the speaker chose to make that phase of the word more conspicuous; and, through habitually bearing this accent, to retain it generation after generation as part of the normal state of affairs.

But what now caused the early Indo-European to show preference for one element in a word and not for another? To be specific, why did he accent the ending in **rājñás*,¹ the Sanskrit genitive singular

¹ The accent of historical Sanskrit often differs from the accent of parent Indo-European, especially in the nouns.

“king’s,” and not the ending in the nominative plural *rājānas*, “kings”? If our thesis be correct, he neglected to accent the allocative endings which he frequently used, emphasizing only those that occurred less commonly in the stream of speech.¹ But if this be true, namely, that the accented endings were less frequent in occurrence than the unaccented endings, we should find some such difference by examining arithmetically any piece of early Sanskrit literature, so as to see that, if indeed the nominative plural occurred so much more frequently than the genitive singular, the accent, according to our principle of frequency, passed in the latter case, for the purpose of conspicuousness, to the ending.

(3) As has been stated, such a difference in accent between stem and ending is found, for example, in the masculine consonantal declension in Sanskrit. The stem was accented in the nominative, accusative, vocative singular and dual, and in the nominative and vocative plural; but in all other cases the accent was on the ending. Before turning to an arithmetical analysis of their respective frequencies, we can simplify the matter by excluding from consideration all the vocatives and the entire dual. Since the vocative singular, as such, never possessed an inflectional ending, the accent could not but be on the stem. Moreover, in the dual and plural the nominatives were used as vocatives, the two cases coinciding exactly in form and accent. Therefore, we need not consider the vocative as a special case. As for the nominative dual, which was likewise used as the accusative, since the nominative singular and the nominative plural were both accented on the stem, and since the instrumental, dative, ablative, genitive, and locative cases, in the singular and plural, were accented on the endings, we may regard the accent of the entire dual as the result of analogy, which is especially plausible as an explanation of its accent, inasmuch as the dual was rapidly dying out. For this

¹ Similarly, we emphasize *behind* more than *to* in the phrases: “Give it to the boy,” and “It is behind the boy.” On consulting Godfrey Dewey’s tables, we find the word *to* occurring in 100,000 words 2,924 times, whereas the word *behind* occurs only 24. That is to say, nearly 3 per cent of the words we use in the stream of speech are *to*, while *behind* occurs less than one one-hundredth as often. It is clear then that the speaker does not feel urged to keep accenting *to* whenever it appears, to make himself understood. This is undoubtedly the cause of its extreme weakening in “I wanna go,” for “I want to go.”

reason, without any fear of distorting the facts, we may disregard it entirely.

Thus simplifying our problem, let us turn to the singular and plural. The names of the cases printed below in capitals were accented on the stem, and for convenience I shall call them the strong cases; the others, which are accented on the endings, I shall call weak:

<i>Singular</i>	<i>Plural</i>
NOMINATIVE	NOMINATIVE
ACCUSATIVE	accusative
instrumental	instrumental
dative	dative
ablative	ablative
genitive	genitive
locative	locative

Or, taking the present participle of the verb *to be*, which follows the consonantal declension and shows ablaut which arose from the difference in accent, we have in pro-ethnic Sanskrit (masculine):

<i>Singular</i>	<i>Plural</i>
NOM. * <i>sántis</i>	NOM. <i>sántas</i>
ACC. <i>sántam</i>	acc. <i>satás</i>
ins. <i>satā</i>	ins. * <i>sadbhís</i> ¹
dat. <i>saté</i>	dat. } * <i>sadbhyás</i>
abl. } <i>satás</i>	abl. }
gen. }	gen. <i>satām</i>
loc. <i>satí</i>	loc. <i>satsú</i>

To be sure, in later times, after the accent had become petrified, the case of a noun was designated, not only by the individual case-endings, but to a considerable extent by the shift in accent itself and the resultant vowel-weakening. But this difference in stem was fortuitous, entirely secondary, and not even necessary, as is shown by the fact that the strong and weak stems were later levelled out in many languages. Indeed, the position which the accent chose in Sanskrit, already a

¹ In the instrumental and dative-ablative plural the forms printed above are restored forms only in respect to accentuation.

highly developed language, almost proves that its position was in no way a case-sign. If one assumes that stem-accent was a sign of the nominative because it occurs in the three nominatives, we nevertheless find it also in the accusative singular. And if one adds that it was also a sign of the accusative, why, then, was the accusative plural accented on the ending? This is indeed the touchstone. If we can show that the accusative plural, accented on the ending, was used as seldom as any other oblique case, and that the strong, or stem-accented, cases were distinctly more frequently used, we have the first definite proof of our thesis. Let us turn to a numerical analysis.

The oldest Vedic hymns, those of the *Rikṣamhita*, were analyzed by Professor Charles Rockwell Lanman in his "Noun Inflections in the Veda."¹ His results, summarizing the frequency of all case-endings, are found in Table 1, page 583. I shall use this table. The neuters, not differing in form in the nominative and accusative, have 8,441 nominative-accusative singular forms, and 3,629 nominative-accusative plurals. Without implying an exactly equal proportion in fact, I have allotted in each number one half to the nominative, and one half to the accusative. The entire sum is so small that, if it were given completely to one case or the other, it would not seriously alter the relationship. A more exact allotment would be even more greatly in favor of my theory. Lanman's figures are (all three genders combined):

<i>Singular</i>	<i>Plural</i>
NOM. 24,286	NOM. 10,981
ACC. 17,551	acc. 5,353
ins. 4,234	ins. 3,360
dat. 4,092	dat. 363
abl. 923	abl. 124
gen. 5,274	gen. 1,595
loc. 3,789	loc. 1,546

That which we postulated *a priori* we find to be a fact in Lanman's figures. It is indeed strange that the nominative and accusative singular and the nominative plural are, each, more than twice as frequently used as the most frequently used of the weak cases; that there is a

¹ *Journal of the American Oriental Society*, X (1872-80), 325 ff.

decided chasm between the strong and weak cases; that the accusative plural ranks numerically among the weak cases to which it accentually belongs.¹

It may, of course, be argued that all inflectional endings are so frequent that it is strange that the accent did not leave every one. In the course of time, in certain languages the accent did; even in Rigvedic times it had already shifted in many instances, and in Germanic the last surviving accented suffixal-endings are recorded by Verner's Law.

(4) But there is in Sanskrit another startling difference in accent well worthy of consideration which, because of the frequent parallels to it in other languages, leads one to conclude that it was to a large extent, if not entirely, inherited from the Indo-European parent tongue.

In the athematic conjugations (the Sanskrit classes nos. 2, 3, 5, 7, 8, 9, commonly called the strong verbs), the accent in the present system was on the stem in the present and imperfect singular active (*paras-maipadam*), in the third singular imperative active, and in all three first persons imperative, active, and middle (*ātmanepadam*) — in all, thirteen forms. The remaining forms in the present, imperfect, imperative, and the entire optative were all accented on the endings. Further, the perfect system in Sanskrit, as in Germanic, shows stem-accent in the singular, but, for the most part, on the endings in the dual and plural. It was clearly a difference between the singular on the one hand, and the dual and plural on the other. That the imperative did not coincide entirely with this distribution may easily be explained by its contamination with other moods, as is to be expected in the language of a race developing in culture and politeness. An example of similar corruption is the English "Will you please go!" for the older imperative, "Go!"

But there still remains in the major indicative tenses this difference in accent between the singular active with its stem-accent, and the dual and plural active and the entire middle with the accent on the endings. According to our thesis it is, then, to be expected that the

¹ That the neuter accusative plural is accented on the stem and not on the ending is naturally due to its having originally been a collective feminine singular, whose accent it maintains.

singular number active was far more frequently used than either the singular middle or the duals and plurals. Because of this preponderance of frequency there was no need of accent on the ever-recurring singular active endings.

For the sake of clarity, let us do as with the nouns. The names of the numbers printed in capitals indicate stem-accented forms, the others have the accent on the endings.

Indicative					
Active (Parasmaipadam)			Middle (Ātmanepadam)		
SINGULAR	dual	plural	singular	dual	plural
FIRST	first	first	first	first	first
SECOND	second	second	second	second	second
THIRD	third	third	third	third	third

Or, if we take the root *dviṣ*, “hate,” of the second class, which has an Indo-European *eḡ*: *i* ablaut showing the shift in accent, the full grade *eḡ* appearing as Sanskrit *ē* in the accented root, and the reduced grade *i* appearing where the accent was on the endings, we thus have:

PRESENT INDICATIVE

Active		
SINGULAR	dual	plural
1. <i>dvēṣmi</i>	<i>dviṣvās</i>	<i>dviṣmās</i>
2. <i>dvēkṣi</i>	<i>dviṣṭhās</i>	<i>dviṣṭhā</i>
3. <i>dvēṣṭi</i>	<i>dviṣṭās</i>	<i>dviṣānti</i>
Middle		
SINGULAR	dual	plural
1. <i>dviṣé</i>	<i>dviṣvāhe</i>	<i>dviṣmāhe</i>
2. <i>dviṣṣé</i>	<i>dviṣāthe</i>	<i>dviḍḍhvē</i>
3. <i>dviṣṭé</i>	<i>dviṣāte</i>	<i>dviṣāte</i>

So, too, the imperfect and perfect indicative show a similar relationship of accent, though differing in augment, reduplication, or endings. Now if we can show numerically, from some early Sanskrit text, that

the singular active was more frequently used throughout the language than the other five *numeri*, we have found the reason why the accent was not compelled to wander from the stem to the endings in the singular active. That would be a second confirmation of our theory.

(5) Professor John Avery, in his "Contributions to the History of Verb-inflection in Sanskrit,"¹ examined among other things the numerical frequency of verb-forms in the *Rikṣaṃhita*. His results in the tables on pages 311 ff. I have added together and give below. My additions represent the first, second, and third persons, singular, dual, and plural, active and middle, and include all moods and tenses of all classes of verbs considered in Avery's study. My purpose in so doing was to get a precise idea of the relative use of the three *numeri* both in the active and middle, thus approaching the Indo-European ratios as nearly as possible. The summarized results are:

ACTIVE		
<i>Singular</i>	<i>Dual</i>	<i>Plural</i>
1. 612	17	932
2. 4,378	1,143	963
3. 5,467	265	2,692
<hr/> 10,457	<hr/> 1,425	<hr/> 4,587
MIDDLE		
1. 428	11	512
2. 914	120	166
3. 2,257	92	1,589
<hr/> 3,599	<hr/> 223	<hr/> 2,267

Or, the active and middle together:

<i>Singular</i>	<i>Dual</i>	<i>Plural</i>
1. 1,040	28	1,444
2. 5,292	1,263	1,129
3. 7,724	357	4,281
<hr/> 14,056	<hr/> 1,648	<hr/> 6,854

¹ *Journal of the American Oriental Society*, X (1872-80), 220 ff.

As we postulated *a priori*, so we find *a posteriori* in fact that the singular active is far more frequently used than the other parts. Indeed, all the singulars are more than twice as frequent as all the duals and plurals together; the singular active is more frequent than the entire middle. It is, then, not strange that the endings of the singular active, occurring so frequently, had no need of special accent; whereas the other endings, comparatively much less frequent, demanded stress.¹

(6) There was a third great difference of accent in pro-ethnic Indo-European, namely, between the present system and the strong or root aorist. A well-known example in Greek is:

Present λείπειν

Aorist λιπέιν

which has the base $*l^e/_o\dot{\alpha}q^{ue}/_o-$. The accent, which we find on the first syllable of the base in the present, must have been on some other syllable in the aorist, to account for the reduced grade of the stem-vowel. Endless examples of this variety of ablaut in the various bases may be found by consulting the handbooks. The strong, or root, aorist was unquestionably a distinct category.

The whole question of the aorist is unfortunately one of the great philological *Streitfragen* hinted at in the Introduction, and for this reason the application of our thesis here will be most difficult. For we are in no way clear as to just what elements originally constituted the strong, or root, aorist, nor as to their function and meaning. All we can definitely say is that the root-vowel in the strong aorist was reduced, and that this reduction ensued from a shift in accent.

Now the question arises: Why this shift in accent? Was the differing accent the sole distinguishing characteristic of the aorist? But first let this question be asked: Does accent move from one part of a

¹ For the aid of other possible investigators in this field, I should like to call attention to slight arithmetical errors which have crept into Professor Avery's tabulation: Page 311, in the column of totals in the Subdivision A, for the Simple-Aorist I, Subjunctive, read 335 instead of 338. Accordingly, on page 319, in the General Summary, Column A for the Simple-Aorist I, Subjunctive, of the Simple Verb, read 607 for 610. Hence, for the total of the Simple-Aorist, read 1850 for 1853: for the total of the Simple Verb in column A, read 20,278 instead of 20,281. Further, for the total of column A under the Denominative Verbs, read 285 for 185. Hence, for the Grand Total A at the bottom of page 319, read 22,558 instead of 22,461.

word to another of its own free will and arbitrarily, for the sole purpose of forming a new category, or is it drawn to that different part of the word which takes on accent? In other words, did the pro-ethnic Indo-Europeans accent the aorist away from the base because they wanted to distinguish a new aspect of which they were in need, or did they have no control over the matter? To say that they deliberately shifted the accent means that one fine morning the pro-ethnic Indo-Europeans arose from their mats and by tacit agreement shifted the accent. For this follows naturally on the assumption that the aorist was so accented simply to differentiate it from the present system, the *imperfectiva*.

But from our analyses of the strong and weak cases of nouns, and the strong and weak numbers of verbs, we saw clearly that the accent shifted from the root to the ending. This shift, further, was not for the purpose of causing a differentiating ablaut, but for the purpose of making more distinct, emphatic, or conspicuous, an allocative ending which through its comparatively rare occurrence would otherwise, if it were not especially accented, be confused with the more frequently used endings; while these latter, through their frequency, and therefore their likelihood of appearing in the stream of language, were in need of no special emphasis. To be sure, after the accent had shifted and *Stammabstufung*, because of purely physical laws, had taken place, the weak stem became a sign of the weak ending, the strong of the strong. But let us not forget that *Stammabstufung* followed the shift of accent automatically, was not originally intended, and, to judge by the numerous levellings which took place in all the languages subsequently, was not in the least necessary.

In the nominative singular, for example, a strong case, the accent did not leave the ending for the stem where we find it, but had (presumably) hitherto been on the stem; and the case-ending, when it ceased to be an enclitic and became permanently suffixed, in no way robbed the stem of its accent. This principle holds true for suffixes from any other source, such as extraction. If the ending in this case had previously possessed accent, it now lost part of it. The vowel in the stem remained in what is called the "Normal Grade." But in a weak case, let us say the ablative, when the enclitic became suffixed to the stem, the accent, as pointed out above, passed on to the ending,

to make it more conspicuous. For this reason we call the resulting stem-vowel reduced (the "Reduced Grade"). In fine, it was not a question of the passing of the accent from the ending to the stem in the strong cases, but of the shifting of the accent from the stem to the endings in the weak. This shift, as already indicated, sprang from the desire to make more distinguishable the less frequently occurring endings.

So, too, with the strong, or root, aorist. There must have been something independent of the base or termination which distinguished the aorist aspect from the imperfective, just as the personal or case-ending distinguished the cases, persons, or numbers from each other elsewhere. The fact that we cannot definitely lay our finger on this aoristic element in the strong, or root, aorist, as we can in the *s*-aorist, does not permit us to argue that there was originally no such element there. For to argue that there was no such element there, is to argue that the pro-ethnic Indo-Europeans by tacit agreement suddenly shifted the accent for the sake of having a new aspect. Accent does not move arbitrarily; it is attracted or repelled by some element in a word which, as the case may be, needs or does not need to be made more conspicuous so as to avoid misunderstanding. Since we cannot point out what this aoristic element was, we must simply postulate its existence, and either suppose that subsequently it disappeared, or else admit that we fail as yet to recognize it. In so postulating, the present author in no way departs from approved scientific procedure. As the unknown rays were called the X-rays, so now let us call this unknown element the X of the aorist, leaving it to morphology to discover what the X of the aorist really was.¹

Now, the accent moved from the first syllable of a dissyllabic base elsewhere, that it might rest upon the X of the aorist, and make it thereby more conspicuous, differentiating it more distinctly from the *imperfectiva*. If our theory be true, the reason that it so shifted was because the aorist as an aspect appeared less frequently in the stream of spoken language, and therefore needed to have its distinguishing

¹ I am, of course, aware of the theory that the so-called thematic vowel *e/o* is the element which may be regarded as distinguishing the strong aorist from an (originally) non-thematic present. But this theory can by no means yet be taken as proved.

element, the X of the aorist, made more conspicuous by greater accent, to avoid possible confusion with the *imperfectiva*. The concomitant reduction of the vowel of the first syllable of the base was, if not gratuitous, at least not essential.

But if this be true, we should find then by an analysis of a piece of language where the aorist is still a vividly felt aspect that the *imperfectiva* (that is, the entire present system) are more frequent than the entire aoristic system. The question at once arises whether one should include also other varieties of aorist, for example, the *s*-aorist, which did not share in this change of accent, or only the strong, or root, aorist where the shift of accent occurred. To avoid dispute I shall include the *s*-aorist and give its percentage of the whole.

Using Table I of L. Schlachter's "Statistische Untersuchungen über den Gebrauch der Tempora und Modi bei einzelnen griechischen Schriftstellern,"¹ we find on pages 165 ff., "Sämtliche in Herodots Geschichtswerk (ed. Kallenberg, 1899-1901) mit Weglassung der zu *ἐτραπόμην* und *εἰρόμην* gehörigen Bildungen (cf. § 44) vorkommenden Verbalformen verteilen sich auf Tempora und Modi in folgender Weise." The total number of verb-forms counted was 36,386, of which I shall give figures for only the aorist active, middle, and passive, and of the present system, the present and imperfect:

	AORIST		IMPERFECTIVA	
	<i>Active and Middle</i>	<i>Passive</i>	<i>Imperfect</i>	<i>Present</i>
indicative	3,836	394	4,900	5,403
participle	4,218	593		6,451
infinitive	1,811	178		3,171
subjunctive	466	65		338
optative	207	25		432
imperative	87	5		191
Total	10,625	1,260	4,900	15,986
Entire aorist				11,885
All <i>imperfectiva</i>				20,886

¹ *Indogermanische Forschungen*, XXIII (1908), 165 ff., a continuation of XXII (1909), 202 ff., and continued in XXIV (1909), 189 ff.

Or, in percentages, according to Table I B, page 169:

Aorist active and middle	29.1
Aorist passive	3.48
Aorist total	32.58%
Imperfect tense	13.5
Present tense	44.4
<i>Imperfectiva</i> total	57.9%

In short, the present system is almost twice as frequent as the entire aorist, including the *s*-aorist. But let us see what it would be without the *s*-aorist, which, not sharing in the shift of accent, need not be considered here. By consulting the last column (marked "Herodot," on page 181) and adding all the sigmatic aorists on the one hand and all the asigmatic aorists on the other, we find:

Sigmatic aorist	5,308
Asigmatic aorist	4,498
Athematic aorist	819
Total aorist, active and middle	10,625
Passive aorist	1,260
Total aorist	11,885

Reducing the same to percentages, we see that the strong, or root, aorist, including passives, is 55.44 per cent of all the aorists, including passives. Now 55.44 per cent of 32.58 per cent — the percentage of all aorists in Herodotus to all verb-forms — is 18 per cent, the percentage of strong, or root, aorists, including the aorist passive, in the whole number of verbal forms — 36,386 in all. In other words, the *imperfectiva* are more than three times as frequent as the strong, or root, aorists.

The ratios for Thucydides¹ are roughly the same. I chose Herodotus because his style is less polished and elaborate than that of the later historian. But, even so, it is hardly likely that his use of the aorist and imperfective in historical narrative corresponds exactly to popular spoken usage. But by examining the figures for Homer's *Iliad* and

¹ *Indogermanische Forschungen*, XXIV (1909), 189.

Odyssey,¹ we find the aorist, though still less frequent than the *imperfectiva*, yet more frequently used than by Herodotus or Thucydides.

That we are justified, however, in trusting the Herodotean percentages is clear from the comparative rareness of the aorist in the *Rikṣaṃhita*. I refer to the general summary on page 319 of Avery's "Verb Inflection in Sanskrit." As pointed out above,² the total verb forms of the *Rikṣaṃhita* are 22,558, instead of 22,461 as given by Avery.

Present System

Simple verb	15,048	
Causative	919	
Desiderative	131	
Intensive	479	
Denominative	285	
Total Present System	16,862	75 %

Simple Aorist

Simple verb	1,853	
Causative verb	423	
Total	2,276	10.1 %

S-aorist

Simple verb	756	
Intensive verb	3	
Total	759	3.1 %
Total Aorists	3,035	13.2 %

In other words, the present system in Sanskrit is more than five times as frequent as the total aorist system; or more than seven and one-half times as frequent as the strong, or root, aorist alone. Hence, we must say here as we have said before, that, because of the rareness of the strong, or root, aorist in comparison with the present system, from which it differed only by the X of the aorist, the accent, according to our principle of frequency, moved elsewhere from the first syllable of the base, bringing about the reduction of the root-vowel.

¹ *Indogermanische Forschungen*, XXII (1907), 210 ff.

² See p. 13, n. 1.

(7) Let us now turn to still another difference in Indo-European accent, which was to a considerable extent still maintained in early Sanskrit, and the exact position of which is clearly attested by numerous traces of ablaut both there and in other languages. I refer to the varying accent of the present stem of the verb-classes, which in the strong numbers (that is, 1st, 2nd, and 3rd, singular active, present and imperfect), accented with decided regularity either the first syllable, the infix, or the formant, though to some extent this original condition of things has been obliterated even by Rigvedic times.

Of course, where the present stem was a monosyllabic base, as in the root *es* (the verb substantive), **és-mi*, Sanskrit *ásmi*, the accent was perforce on the stem in the singular active, and on the endings elsewhere, for reasons pointed out earlier. But there were many bases which were either dissyllabic by nature, such as **l̥e/oḷq̥e/o-*, or else became dissyllabic by the addition of some stem-building suffix or infix. Invariably in the latter case, the accent shifted from the root to the said infix or formative suffix of the present stem in the strong number. As already indicated, not only is this shift in accent clearly apparent from the concomitant reduction of the root-vowel, but in many instances the accented affix still bore the stress in Rigvedic times.

Since the stem-formant or infix distinguished the various *Aktionsarten* of the present classes from one another, we must assume that the cause of this shift of accent was the desire of the speaker to make more conspicuous that particular part of the stem which was peculiar to it, and the cause of this desire was the rareness of these stems as compared with others. If this be the case, we should find that the stems which accent the stem-building element occur much more rarely than the others. But before proceeding, let us arrange the present classes from this point of view.

In Sanskrit the verbs of Class I were accented on the first syllable of the stem. The third singular present of the root *bhū*, "to be, become," was *bhāvati*.

Class II, which was made up of many monosyllabic bases such as *es*, nevertheless had in the case of dissyllabic bases the accent in the singular active indicative on the first syllable, as is clearly shown by the vowel-weakening of the second syllable of *brávitī*, "he says," of the

root *brū* "to speak."¹ Furthermore, this is the root-class, in which the endings are suffixed to the root without any stem-building element.

The verbs of Class III have reduplication in the present, such as *hu*, present *juhōti*, "he sacrifices." These we must leave out of consideration entirely because of their intimate connection with the perfect system.

Class IV contains the *ya*-stems, in which the accent is generally on the root in the reduced grade, as *div*, third singular *dīvyati*, "he plays." But here we must be exceedingly careful, for, though the root has accent, yet the reduced grade of the root-vowel almost proves that the original accent was elsewhere. There is, moreover, some evidence in the *Rigveda* that the accent might rest on the *-ya*.² If we consider such roots as **bhrāṇš*, *bhrāṣyati*; **drñh*, *drhyati*; **vyadh*, *vidhyati*; **rañj*, *rājyati*, and the like, it is to my mind unthinkable that the accent had always been on the reduced grade of the vowel. But if one assumes that the accent was originally on the *ya* of the stem, it is not difficult to perceive an excellent dissimilatory cause for its recession, when one remembers that the passive, even in Rigvedic times, was precisely similar to the *ya*-stems in the middle inflection, differing only in point of accent, which with the passives was consistently on the *ya* of the stem. Perhaps, then, there is some historical connection between these two categories.

Class V builds its present stem by means of the suffix *nō*: *nu*,¹ with accent on the suffix *nō* in the strong persons (see p. 11), on the endings, with the *nu*-suffix, in the weak. The root-vowel is reduced throughout: for example, *su*, *sunōti*, "he presses out," *sunumās*, "we press out."

Class VI has its accent on the stem-vowel, thereby reducing the first syllable of the root. The accent remains on the theme-vowel throughout the present system. An example is the root *tud*, third singular present *tudāti*, "he strikes."

Class VII has a nasal infix in the present stem, the accented *ná* being infixed before the last consonant of the root in the strong persons, the consonant *n* being infixed in the same position in the persons having

¹ Hermann Hirt, *Der Indogermanische Vokalismus* (Carl Winter, Heidelberg 1921), p. 212.

² William Dwight Whitney, *Sanskrit Grammar* (Harvard University Press, Cambridge, Massachusetts, 1923), pp. 273 ff., §§ 761b, 765, 767.

accent on the endings. The root-vowel is reduced throughout: for example, *bhid*, *bhinādmī*, "I split," *bhindmās*, "we split."

Class VIII forms its present stem with an *ō:u* suffix, the accented *ō* in the strong form, but *u* (with accent on the endings) in the weak: for example, *tan*, *tanōmī*, "I stretch out," *tanumās*, "we stretch out."

Class IX forms its present with the accented suffix *nā* in the strong forms, and the suffix *nī* or *n* (with accent on the endings) in the weak. The root *krī* is an example of this; *krīnāti*, "he buys," *krīnīmās*, "we buy." The root-vowel is reduced throughout.

Now, disregarding the third or reduplicating class entirely, and assuming that the fourth or *ya*-class was originally accented on the stem-building element before a possible dissimilation from the passives took place, we find that Classes I and II have accent on the first syllable, which contains generally the normal grade of the vowel, either throughout, as in Class I, or in the strong forms, as in Class II. The remaining Classes, IV, V, VI, VII, VIII, and IX, have the accent in the strong forms, wherever the strong-weak distinction is made, on the stem-building element, whether infix or formant. Where the strong-weak distinction is not made, the accent is consistently on the suffix. In consideration of these facts, we should accordingly expect to find Classes I and II much more frequently used than any one of the remaining classes.

Professor John Avery presented at the meeting of the American Oriental Society in Boston, May, 1877, a paper "On the Formation of Present-Stems of the Sanskrit Verb."¹ On page cxlii he arranges the foregoing classes differently, thus:

The Indian Classification

I
II
III
IV
V
VI
VII
VIII
IX

Avery's Classification

IVa
I
II
IVc
IIIa
IVb
IIIc
IIIa
IIIb

¹ *American Oriental Society Journal*, X (1872-80), cxli ff.

To these Professor Avery properly adds two more classes which he considers as irregular verbs. Avery's Class *Va* includes those stems having *ī* or *i* before the endings, such as *brāvīti*, "he says"; and *Vb*, those forming stems in *cha*.

His Class *Va*, I shall include with Class I (the Sanskrit Class II) because they are largely dissyllabic bases of the root-class with accent on the first syllable in the strong forms. His Class *Vb* is the Indo-European *sko*-verbs, having accent on the suffix *sko* throughout the entire present system. An example is the root *gam*, "go," *gacchati*, "he goes," from the Indo-European form **gʰmsk̑e/ti*. The original position of the accent is likewise here deducible only from the reduced grade of the root vowel. Some of the *sko*-verbs followed the analogy of verbs like *bhāvati*, and with recessive accent joined Class I; others, like *iṣ*, "wish," stem *i-cchā*, preserved the accent on the suffix and passed into the sixth class: *icchāti*, "he wishes." Since these *sko*-verbs originally formed a separate category, I shall follow Avery in treating them separately.

In the light of this, we should expect to find Avery's Class *IVa*, and Class I plus *Va* together, each much more frequent than the other eight classes, including Class *Vb* (*sko*-verbs).

On page cxlii, in Table II, Avery gives the relative frequency of stems, estimated by occurrences, (A) for the *Rigveda*, (B) for the *Aitareya-Brahmana*, and (C) for the *Nala* and the *Bhagavad-Gītā*, as follows:

	I	II	IIIa	IIIb	IIIc	IVa	IVb	IVc	Va	Vb
A. Totals	4442	1095	877	478	259	5622	977	663	132	272
Percentages	30	7.4	5.9	3.2	1.6	38	6.5	4.5	.9	1.9
B. Totals	926	346	460	180	66	1975	192	380	88	184
Percentages	19.3	7.2	9.6	3.7	1.4	41.2	4	7.9	1.8	3.8
C. Totals	320	21	89	57	11	475	56	138	77	98
Percentages	23.8	1.6	6.6	4.3	.8	35.4	4.2	10.2	5.7	7.3

Or, restricting ourselves to the *Rigveda*, which is chronologically nearest to Indo-European times, we find, adding I and *Va*, which gives 30.9 per cent for the Root or Sanskrit Class II, and arranging in the order of descending frequency:

	IVa	I & Va	II	IVb	IIIa	IVc	IIIb	Vb	IIIc
	5622	4442	1095	977	877	663	478	272	259
	132								
A. Totals	5622	4574	1095	977	877	663	478	272	259
Percentages	38	30.9	7.4	6.5	5.9	4.5	3.2	1.9	1.6

In other words, that which we assumed *a priori* we again find in fact: those stems accented on the root or first syllable of the stem are not merely more frequent of occurrence in the stream of spoken language than those present stems accented in part on the stem-building element, but are enormously more frequent. Indeed, the smaller category of first-syllable accented stems occurs more than four times more frequently than the most frequent class with accent on the formant. This is the fourth confirmation of our theory.

(8) The four analyses given above, which constitute four different, and, as I think, distinct proofs of the power of relative frequency, cover most of the obvious differences in accent in the parent Indo-European language. Corollary to this is the suffix-accent of the present active participle in *ant*, the present middle participle in *āna*, *māna*-, the perfect active participle in *vas*, the perfect middle participle in *āna*, the past participle in *ta*, the stems in *mant*, *vant*, *ti*, *tu*, and so forth, all of which reflect the original Indo-European conditions, as ablaut in other languages indicates. And here, as above, we must assume that the cause of the shift of accent to the formant was the comparative rareness of the latter in the stream of speech. For some cases this is actually demonstrable by recourse to Lanman's valuable "Noun Inflections in the Veda," or to Avery's excellent study. Indeed, the most cursory examination of a few hymns of the *Rigveda* will so clearly convince the reader of the rareness of these suffixes compared with others that the present writer feels that he may safely assume that, if their rareness is not in itself sufficient to substantiate his theory, which is undoubtedly not the case, their frequency, on the other hand, is not so pronounced as to vitiate it.

Aside from the varying accent in the case-endings of nouns, the personal verb-endings, the formants of the present stem, and the aorist-imperfective aspects, all of which have been demonstrated; and from the varying accent of the nominal-adjectival stem-building suffixes,

the relative frequency of which has in the foregoing paragraph been with but little temerity assumed, there are two other differences of accent whose treatment here is precluded, not from lack of data as to their frequency, but from the total lack of necessary morphological information. By this I mean such differences of accent as occur in the Indo-European *o*-declension, in which, throughout the entire paradigm, save for the vocative singular, the accent remains rigidly on either the root or stem syllable; *kā́mas* (-*m*), "love," has accent throughout on the first syllable; *devás* (-*m*), "god," — save for the vocative singular *déva* — maintains its accent throughout on the second.

According to our thesis, such nouns with accent on the first syllable should be much more frequent than those with accent on the second. Or, in the words of the theory, there must have been something in the second syllable which placed it in a distinct category; and this something, which has either subsequently disappeared, or, though remaining, succeeds in eluding observation, during Indo-European times drew the accent upon itself as a result of its infrequency. To ascertain which class of *o*-stems is more frequent in the *Rigveda* would be a comparatively simple matter. But after having done so, and even after having found that the present hypothesis is correct, we could in no way use it as an argument for the support of the theory. For, though in the matter of the strong, or root, aorist we might postulate some element which distinguished that category from the *imperfectiva*, we cannot do the same with the accent-difference in the *o*-stems. For to no examination does a difference of accent betray any categorical difference of meaning. Unless new linguistic evidence comes to light, morphology will not be able to help. Considering the unlikelihood of such new evidence, we must rely rather upon the principle of frequency to throw light on morphology, than upon morphology to throw light on the present theory.

Another difference in accent occurs in the *composita*. This subject I hope to deal with separately at another time.

(9) Having treated a great majority of the salient differences in accent in the parent Indo-European language, we shall now turn to a consideration of shifts of accent in particular languages of like descent. As suggested in the introduction, it is unfortunately impossible to

enter here into a meticulous historical delineation of every shift of accent in every Indo-European language. If for no other reason, the vastness of the field alone prevents any one man from doing so. This, however, is not so serious as it first sounds, since a number of the various accent-shifts are similar, and by treating one, one *ipso facto* treats many.

(10) Few languages show a more interesting change of accent than Latin. In pre-historic times the entire accent shifted to the first syllable of every word, bringing about a weakening of certain vowels under determinable conditions in the unaccented syllable. But by historical times it had begun to recede in some cases from the first syllable¹ until it finally rested firmly on the penult if it was long, or on the antepenult if the penult was short. In this position we find the accent in Classical Latin, thus:

**cónfacio* > **cónficio* > *confício*
**cónfactus* > **cónfectus* > *conféctus*.

The weakening of *a* to *i* in the open syllable of *conficio*, and that of *a* to *e* in the closed syllable *confectus*, give tangible proof of the earlier condition of things.

Now what caused the accent to wander to the first syllable, although generations of speakers had been capable of speaking clearly with the accent in its original position? And after the accent had shifted to the first syllable and the language had digested this change, why did it recede again? Many theories have been advanced to account for such mutation, though none, I believe, enjoys universal and complete assent. The present theory maintains that a change in language lies largely in language itself; and that a change in accent is due to some change of frequency of use.

Let us suppose, what is clearly attested by tmesis in early Sanskrit and Greek, that the early Latin or late Indo-European prefixes were, like some of the modern German, separable. Let us then assume that at a later period they became firmly fixed as non-separable prefixes, in which condition we find them in early written Latin. Now, the purpose of a compound is to express a shade of meaning not expressible

¹ See C. Exon, *Hermathena*, XIV (1906), 117.

by the simples.¹ Indeed, we can constantly observe in daily speech that such differentiation is the very purpose of compounding. Hence, at a very early time, **confacio*, *dimitto*, *invenio*, **prodouco*, and the like, differed noticeably from *facio*, *mitto*, *venio*, *douco*, and the like, in meaning. Accordingly, there existed by the side of *facio* a dozen different compounds of *facio*. At the beginning of compounding (which must have originally been sparse and only as necessity demanded), since the stem of *facio* was to be found not merely in the simplex, but likewise in every one of its compounds, the stem *facio* was therefore, *ipso facto*, not only more frequent than any individual compound, but more frequent than all the compounds of *facio* reckoned together. Therefore, when the prehistoric speaker of Latin, using both the simples and compounds together in his daily speech, wished to differentiate, he tended to accent that in **confacio* which distinguished it not only from *facio*, but from **adfacio*, **infacio*, **obfacio*, and so forth, namely, the prefix.

Moreover, we can see clearly, in the light of our theory, why accent in time should leave the ever frequently recurring endings of a word. That shift would in turn throw the accent toward the stem, and thus easily account for the first syllable becoming accented in most, if not all, of the simples. Hence, we have a clear reason why the accent might well be further drawn from the stem of compounds to the first syllable, the prefix. Since this is very likely the cause not only of Latin, but of most other shifts of accent to the first syllable, it is not inopportune to ask why the accent, once so successfully tied to the first syllable, ever receded again to the penult or antepenult as the case might be.

As the process of compounding continued, and the prefixed verbs and nouns became almost as frequent as the *simplices*, the compounded word began to be felt less and less as a compound, and more as an individual *Gestalt*. This development is attested by the frequent assimilation of final sounds of the prefix to initial sounds of the stem (*conligo* > *colligo*), which would not have taken place and remained permanent if the force of the compound had constantly been in the mind of the speaker; and it is also attested by the fact that in late

¹ Professor Starck reminds me of pertinent examples in German, e.g., *steinreich* as contrasted with *steinreich*, *blütarm* but *blutärm*.

and vulgar Latin the force of the compound was gradually lost. As the increasingly frequent use of compounds continued, it was no longer a question of distinguishing, for example, *conficio* from *facio*, which the different vowel easily accomplished, but of differentiating between *conficio*, *conicio*, *conduco*, *confero*, and the like, and similarly between the *pro*- compounds, the *in*-, the *ex*-, the *ad*-, the *per*- compounds, and so forth. Consequently, the accent gradually left the first syllable for parts of the word where we find it in Classical Latin.¹

But if this be true, we should by an examination of a piece of Latin find the compounds almost as frequent as the simples. Using Lane Cooper's *A Concordance to the Works of Horace*,² I have added the occurrences of ten simple verbs in all their tense forms, participles, infinitives, gerunds, gerundives; and for each verb the similar occurrences of all its verbal compounds which appear in Horace, namely:

dare:

circumdare,³ abdere, addere, condere, abscondere, recondere, credere, concredere, dedere, didere, edere, obdere, perdere, prodere, reddere, tradere, uendere.

agere:

abigere, ambigere, cogere, degere, exigere, perigere, redigere, subigere.

uidere:

inuidere, peruidere, praeuidere, prouidere, diuidere.

ire:

abire, adire, ambire, anteire, coire, exire, inire, interire, obire, perire, deperire, disperire, praeterire, prodire, redire, subire, transire.

¹ The accent of compound verbs in the *Rigveda* is similar, the accent passing from the verbal prefix in subordinate clauses to the verb.

² Carnegie Institution of Washington, 1916.

³ Obviously the crystallizing of a few of these words into conventionally recognizable compounds (for instance, *circumdare*) first took place after the period of vowel-weakening under accentual conditions; yet it is impossible to deny the previous existence, if not of the compound, at least of the collocation *circum* with *dare*. In *abdere*, *condere* and several others of these compounds, the speaker of Latin certainly saw compounds of *dare*; etymologically they contain **dhē*-, not **dō*- except so far as these two had become confused, whether in I.-Eu. or in Italic.

ferre:

afferre, adferre, anteferre, auferre, conferre, deferre, differre, efferre, inferre, offerre, perferre, proferre, referre, sufferre, transferre.

facere:

afficere, conficere, deficere, efficere, inficere, officere, perficere, proficisci, reficere, proficere.

legere:

colligere, eligere, religere, seligere, subligere, diligere, intellegere, neglegere.

ducere:

adducere, conducere, deducere, diducere, educere, inducere, perducere, producere, reducere, subducere, traducere.

capere:

accipere, concipere, decipere, excipere, incipere, percipere, praecipere, recipere, occupare.

dicere:

addicere, edicere, indicere, interdicere.

It is observable that only the most frequent *simplices* have been taken, without any regard for their number of compounds. I hope the absence of *esse* above will be pardoned, because of its extensive use in periphrastic constructions. The results are:

	<i>Simple</i>	<i>Compound</i>
dare	122	238
agere	83	57
uidere	107	58
ire	63	171
ferre	118	140
facere	123	43
legere	31	46
ducere	66	67
capere	23	111
dicere	193	22
Total	929	953

In short, what we assumed *a priori* we find in fact: the compounds are roughly as frequently used as the simples. But let this be understood: we could include by the score additional verb-stems which admit compounding, but the number of prefixes so usable remains fixed to a few dozen. In this we have a condition somewhat similar to *master-mister* (see Introduction). The prefixes, both by their frequent occurrence and their limited variety, serve, so to speak, as a common denominator; the distinctive part of the word is what follows. Indeed, we may look upon the whole problem of accent in this light. As long as *facio*, for example, because of the rareness of its prefixed forms, was a common denominator to its compounds, the accent tended to pass from the common denominator to the distinguishing part, the prefix. As prefixing, however, increased, until the prefixes became, as it were, common denominators to the roots, the accent in turn began to recede from them. To be brief, accent on a frequently used prefix or suffix in the stream of language must be, by the very nature of things, ephemeral. For again, that which is less needy of emphasis, is accordingly less emphasized; and nothing so obviates the necessity of accent as a relatively high frequency of use.

Why the accent finally rested on the penult or antepenult is hard to say with certainty. Perhaps it was, as some maintain, the consequence of secondary accentuation. Perhaps it was due to analogy. The accent left the prefixes, and, after syncope had taken place in certain cases, found itself naturally in so many cases either on a long penult, or on the antepenult preceding a short penult, that through the preponderance of frequency the others took on this mode of accent. The accent, leaving the prefix in *conficio*, *conficere*, *confeci*, *confectus*, would, in falling on the succeeding syllable in many forms, obey the penultimate law, whereas the first-syllable accent, maintained in *facio*, *facere*, *feci*, *factus*, would fulfil the same conditions. Let us not forget that such forms, when we consider in addition all the nouns, pronouns, and other parts of speech, either by maintaining first-syllable accent in simples, or by shifting it to the following syllable in prefixed compounds, very frequently observed the penultimate law. The frequency of such a penultima-antepenultima accent could easily by analogy extend throughout all other forms where the receding accent had left a confusion.

To show that this is not a matter of mere hypothesis, I have examined the first and third books of Caesar's *Gallic War*,¹ arranging the words in six categories according to the actual position of the accent as it appeared in the various inflected forms occurring in Caesar: (1) accent on the prefix of prefixed compounds; (2) accent immediately after the prefix in prefixed compounds; (3) accent elsewhere in prefixed compounds; (4) accent on first syllable of simples; (5) accent elsewhere in simples; (6) accent on monosyllables. If analogy did indeed operate here, we should expect to find the sum of groups 2, 4, and 6 — in which the accent in leaving the prefixes of compounded words, while remaining on the first syllable of simples, obeyed the three-syllable law — so much more frequent than the sum of classes 1, 3, and 5, that the accent of the superior number spread by analogy throughout. The fact that the secondary accent undoubtedly assisted in this, does not in any way vitiate the presumption that the original impulse was first frequency and then analogy. Let us turn to the analysis:

Natural Forms

(2)	(4)	(6)
691	3009	1692 = 5392

Analogous Forms

(1)	(3)	(5)
214	514	1413 = 2141

Totals 7533

Natural Forms 71.57 per cent

Analogous Forms 28.43 “ “

In other words, in the confusion of accent resulting from its recession from the prefixes, the accent of almost three quarters of the words accidentally obeyed the three-syllable law, and, through sheer preponderance of frequency, brought the remaining one quarter into line. In this, the position of the secondary accent decidedly assisted. Moreover, the conditions of the accent in Early Latin smack of the battle-

¹ Edition of H. Meusel (Berlin: W. Weber, 1894).

field of analogy, where *fácilius*, *séquimini*, *cécidero*, *múlierem*,¹ deliberately keep the accent on the first syllable of the simple, despite the three-syllable law, at least as late as the time of Plautus.

One may rejoin that the ratio of three to one is not sufficient for analogy. But any ratio of analogy depends, of course, upon the individual language concerned. Unfortunately, in spite of the frequent use of the concept of analogy in modern philology, philologists have not felt called upon to establish ratios of frequency in a given language, at which analogy not merely may operate, but must operate. Indeed, one occasionally feels that the ideas of analogy, *Sprachmischung*, borrowing, substrata of speech, and the rest, concepts perfectly sound in themselves, have often at the last minute been used as scapegoats, because nothing else seemed to work.

To determine whether or not three to one is a sufficient ratio for analogy in Latin, we can examine a different and unrelated case of Latin analogy, observing under what conditions levelling did or did not take place. Let us take the nominal *s*-stems: for example, *tempus*, *corpus*, *labor*, and *honor*, from earlier *labos* and *honos*. That these stems all originally ended in *s*, is a well-known fact. But in the cases having an ending, the *s*, being intervocalic, became voiced and eventually changed to *r*. Genitive **temposes* and **honōses* became *temporis* and *honōris* respectively. In the masculines and feminines, the *r* of the oblique cases spread further, by analogy, to the nominative; yet in the neuter the nominative-accusative singular *s* remained. *Honos* became colloquially *honor* (though *honos* continued as an archaism in literature), but *tempus* always remained *tempus*. Why? Since analogy depends admittedly upon frequency, and since the neuters differed from the masculines and feminines, in respect to the presence or absence of endings, only in the accusative singular, — the accusative singular of *tempus* being *tempus*, of *honor*, *honorem*, — the added frequency of the neuter accusative singular, which ended in *s*, must have prevented the *r* of the oblique cases from levelling away the *s* of the nominative and accusative singular. This fortunately is not a matter of mere opinion. By consulting Cooper's *Concordance to Horace*, and adding the number of times neuter stems occur in *-s* or *-r-*, and the number of times the nominative singular of the mascu-

¹ Cf. Lindsay, *Philologus*, LI (1893), 364 ff.

lines and feminines occurs as opposed to all other cases, we can get a good working hypothesis toward an actual ratio of analogy.

Taking as examples of neuter *s*-stems, *decus*, *dedecus*, *facinus*, *faenus*, *frigus*, *litus*, *nemus*, *pecus*, *pectus*, *penus*, *pignus*, *stercus*, *tempus*, *foedus*, *funus*, *genus*, *glomus*, *latus*, *munus*, *onus*, *opus*, *pondus*, *scelus*, *sidus*, *ulcus*, *uellus*, *uulnus*; and taking as *-s*-stem masculines and feminines those words in which *s* is attested by the grammarians:¹ *arbor*, *labor*, *uapor*, *clamor*, *color*, *amor*, *pauor*, *timor*, *honor*, *odor*, *olor*, *lepor*; we gain the following results:

<i>Neuters</i>	<i>Occurrences</i>	<i>Percentage</i>
Nom.-Acc. Sing. ending in <i>-s</i>	193	49.5
All other cases, ending in <i>-r-</i>	197	50.5
Total	390	100.0

<i>Masculines and Feminines</i>		
Nom. Sing., ending in <i>-s</i> , <i>-r</i>	59	27.3
All other cases, ending in <i>-r-</i>	157	72.7
Total	216	100.0

The ratio of 27.3 to 72.7 per cent is astonishingly similar to the ratio of the words with analogous accent under the three-syllable law to those whose accent is, according to our theory, inevitable and natural.

Tempus and its like retained the *s* in the nominative singular, because it was roughly as frequently used as the forms in *-r-*. *Labos*, however, became *labor*, because the forms in *-r-* were nearly three times as frequent, and levelled the *r* throughout accordingly. Therefore, there is nothing to prevent our saying that, since three quarters of all the words in the stream of Latin speech had, as it happened, their accent on the penult or antepenult, and in the case of monosyllables, on the monosyllable, the preponderance of this order, after some battling, levelled itself through the remaining quarter. This was further aided in many cases by the position of the secondary accent (*conditiō*, *conditiōnibus*).

A similar phenomenon may be observed in English, which on the one hand inherited to a large extent first-syllable accent, and on the

¹ A list of sufficient length for our present purpose.

other adopted Norman words with varying accent. In such words as *parliament*, *promise*, *fiction*, and the like, generally old and much-used borrowings, the first syllable has become accented.

(11) There is another interesting difference in accent, this time in a modern language. I refer to the separable and inseparable prefixes in German — some with accent, some without, many, under certain conditions, varying in accent. An especially interesting feature is that the prefixes which may never be separated, or used adverbially, have generally lost the heavy first-syllable accent. Dr. F. W. Kaeding and his colleagues examined for stenographic purposes word-frequency, syllable-frequency, and the frequency of printed letters in the German language.¹ On page 464 they give the comparative frequencies of all prefixes among 10,910,777 words. From their extensive list, arranged in the order of frequency, I here quote the first twelve:

ge-	443,639
be-	226,827
ver-	195,412
er-	122,662
an-	85,473
zu-	75,218
vor-	59,132
aus-	52,778
un-	49,831
ent-	48,456
da-	48,252
ein-	45,645

It is, indeed, strange that the first four prefixes which lead the list with tremendously greater relative frequencies are never accented. Yet we must not forget that the prefixes *zer-*, *ent-*, and *emp-* are likewise always unaccented, although they appear farther down in the list. Their relative positions of course testify against the principle of frequency. But it must not be forgotten either, as many German critics of Dr. Kaeding's excellent work have already pointed out, that Dr. Kaeding examined such quantities of such vastly different literature —

¹ *Häufigkeitswörterbuch der deutschen Sprache* (Steglitz bei Berlin, 1897).

legal, medical, military, classical, poetical, epistolary, parliamentary, scientific, commercial, translations, and so on — that it is extremely doubtful whether his ratios at all approach those of vernacular speech. Being thoroughly satisfied myself with his results, I mention the criticism, as I shall later of other works, to warn other possible investigators, desirous of working in the same field. That *zer-*, *ent-*, and *emp-* are now relatively infrequent, does not prove that they were so at the time of the fixing of the accent-position.

(12) *Conclusion of Part One.* The foregoing data, if they do not convince the reader as quickly as the frequency of consonants (see below) may, do show a startling confirmation. It cannot be by chance that a difference in accent is regularly attended by a difference in relative frequency. Moreover, theoretically it is certainly to be expected in the language of man, as in human expression in general, that his tendency toward laziness (*Trägheitsgesetz*) will prevent his accenting any element in language which his hearer will understand without accent. Nor is the hearer so likely to understand any element of language unaccented so readily as an element of language which occurs frequently.

PART II. SOUNDS

A. CONSONANTS ¹

(13) Every language must have so great a variety of vowels and consonants that their permutations may, together with the resources of accent and syntax, adequately express its wealth of concepts. Whether the *Urwörter* or *Urausdrücke* were imitative or exclamatory or of some other origin, I do not here presume to judge. For it is patent that, with the continuous development of language, various sounds and sound-groups, once full of meaning in themselves, slowly became abstract symbols, which the speaker of later time, had he reflected on the subject at all, would have considered from any point of view quite arbitrarily selected. It is this later period of development, after language had become largely abstract and had lost whatever its original devices, onomatopoeia and the rest, may have been, that I here intend to examine. I shall call it *post-primitive*.

¹ I have examined for this purpose: Sanskrit, Greek, Latin, Old English, Old High German, Modern Bulgarian, English, French, German, Hungarian, Italian, Russian, Spanish, Swedish, Czech.

(14) Examining the history of any language, we find over a long period of time a constant tendency toward change, not only in accent and meaning of words, but even in the nature of its sounds. On closer analysis, we are startled to find that a given sound, let us say *t*, when it shifts at all in one word, let us say to a *þ*, shifts throughout the entire language wherever *t* occurs under the same conditions. This phenomenon has caused, through its regularity, endless speculation; for it is strange that, if a father can pronounce *t*, the son or grandson, or later descendants, should find difficulty in pronouncing the same sound in the same circumstances. Some scholars have postulated an organic change in the mouth, making it impossible to pronounce a *t*. But, needless to say, there is as yet no anthropological or biological evidence which even pretends to substantiate such a contention. There are, further, endless examples of sound-shifts which took place only in certain positions of a word, initially, medially, or finally, thereby precluding an organic mutation of the vocal system. These scholars, further, forget that a few generations later other changes may take place, as in Germanic, toward those very categories which shortly before were presumably unpronounceable. Moreover, later generations of these supposedly mouth-twisted races, when mixed together in America, all seem in course of time to pronounce with equal ease what is perhaps the most complicated phonetic system ever evolved.

Other scholars have maintained that children's mispronunciation affects their own, if not also their parents', language. But who ever knew a growing child not eager to be rid of his baby-talk, or a parent not eager to help him? And why should the children of Lithuania have found the Indo-European consonants less difficult to pronounce than the children of the Celts or Germans?

Yet other scholars hold that this change is caused by either an acceleration or by a sudden phlegmatism in speaking or, perhaps, in thinking. Though there is undoubtedly some truth in this unproved assertion, — a rapid speaker noticeably skips sounds, even words, — yet when it is considered that each nation has its quota of quick tongues and slow tongues, and that a person at home in both English and German, for example, would be at a loss to tell which language was more rapidly spoken, it is hardly plausible to assume that the Ger-

manic sound-shifts were due entirely and exclusively to an altering speed of enunciation.

Again, there are other scholars who insist that sudden, unaccountable, unrecorded changes in climate or soil have been the cause. But they have always failed to make clear just what a *tenuis* climate or an *aspirate* soil would be!

Finally, another theory is that man is constantly making his speech easier and simpler. That is also, perhaps, to a certain extent true, despite many notable examples to the contrary. Yet, how many syllables would "simplified" French need to express that cumbrous Latin phrase *ueni, uidi, uici*, and how many sounds!

Indeed, all these factors — change in environment, change in linguistic tempo, structural change in the mouth, change in baby-talk, a tendency toward simplification — would undoubtedly influence the actual form of the language, if only on the general principle that a winking of the eye will shake the physical universe. But is it not possible that one of the causes of a phonetic change lies in the structure of the language itself?

(15) Viewing the host of consonants in a language as so many different phonetic sounds, we perceive at once that some are more difficult to pronounce than others. Let us take the dentals as an example: *dh* is both more difficult to pronounce and more audible than *d*, because it has all that *d* contains, plus the *increment of aspiration*. So too the media *d* is more difficult to pronounce and more conspicuous or audible than the tenuis *t*, since it has both the dental position and explosiveness of *t*, plus the *increment of voice*. For similar reasons the aspirate *th* or the affricate *ts*, are both more conspicuous and more audible than the *t*. But how about the spirant *þ*? It seems to be least conspicuous of all, for it has only the interdental position, without the increment of aspiration, the increment of voice, or the *increment of explosiveness*. Yet be it well noted, that what the spirant *þ* may lose in explosiveness, voice, and aspiration, it may gain in *duration* (*þ*, *þþ*, *þþþ*, etc.), a thing almost entirely denied to the other sounds which we have been considering.

As with the dentals, so too with the labials and gutturals. We can almost generalize, saying that the mediae aspiratae are phonetically and acoustically more conspicuous than the mediae; the mediae more

so than the *tenuēs*; the affricates more so than the *tenuēs*, and perhaps even more so than the *mediae*. The spirants may or may not be more conspicuous, depending solely upon their duration.¹ In fact, we might go on to say that each consonant is made up of a certain number of units of phonetic difficulty or acoustic audibility. That is, it is thinkable that with the help of more highly advanced sciences of phonetics and acoustics, we might compare consonants with physical and mathematical exactitude, not only different consonants in the same language, but the same consonants in different languages.

(16) When we consider I.-Eu. **d^e/ōnts* "tooth" (cf. Latin *dens*, older **dents*) and the English *tooth*, older *tōþ*, older **tonþ*, from the Germanic **tanþ*; and understand that the English is another and linguistically later form of the I.-Eu. word, we must, in the light of these facts, say that *d* of the stem **d^e/ōnt-* weakened into *t*, and that *t* of **d^e/ōnt-* weakened into *þ*. So too, the *d* of *duō* weakened into the *t* of *two*. And when we regard the High German *zwei*, we must say that the *t* of a pro-ethnic Germanic form hardened again, this time into the affricate *ts*, written *z*. In this fashion we might continue through all the languages. What is the cause of this?

(17) In Part I we noticed from many clear examples that the accent seems to pass from a syllable, when that syllable becomes too frequent, and likewise from a word. Can we, perhaps, say that the "accent" or conspicuousness left *d* and *t* of **d^e/ōnt-*, because in the stream of spoken language they were becoming too frequent? Such a thing is not so absurd as it at first sounds, for many are the examples where the speaker does not permit two like sounds to follow one another too closely. When two *mediae aspiratae* occurred in the same stem in Sanskrit, the one lost its aspirate quality, for example, Sanskrit *dahati*, "it burns," for older **dhaghati*, from the root **dhagh-*, "to burn" (Gothic *dags*, O. E. *dæg*, O. H. G. *tac*, "day"). Further examples of this reluctance to permit two similar sounds to follow each other too closely are offered by the Sanskrit consonantal laws of verbal reduplication.

¹ Unfortunately, the phoneticians have not hitherto been able to discover exactly how much energy it takes to produce a given consonant, nor how much energy a given consonant conveys to the hearer's brain. Investigations in this field, notably in the laboratory of the Bell Telephone Company, will undoubtedly shed greater light on this important phase of phonetics, and possibly at a not too distant date.

Originally the reduplicated consonant must have been the same as the initial of the stem. Yet in classical times we find that the aspirate is reduplicated by means of the corresponding non-aspirate:

Root	Reduplication
<i>chid</i> , "cut away"	<i>cichid</i> (perfect stem)
<i>dhā</i> , "set"	<i>dadhā</i> (present stem)
<i>bhī</i> , "fear"	<i>bibhī</i> (present stem)

Similarly, in Greek the aspiration of a *tenuis aspirata*, and also the *spiritus asper*, are lost if in the first or second following syllable there is an aspirate:

τίθημι < *θιθημι (Skt. *dadhāmi*)
 nom. θρίξ, gen. τριχός
 τρέφω, fut. θρέψω
 ταχύς, comp. θάττων
 ἔχω < *ἔχω < *σέχω or *φέχω
 πείθομαι < *φείθομαι (cf. Skt. *bodhati* < **bhodhati*)

To these examples from Sanskrit and Greek we might further add the concept of haplology, where one of two similar and adjacent syllables in a word suddenly disappears, as in Modern Greek *δάσκαλος* from classical Greek *διδάσκαλος*. It is unnecessary here to point out that haplology has influenced to a greater or less extent all spoken languages notably German and Modern Greek.

Now, from this it is clear that two similar sounds cannot always follow one another too closely. But in the cases given above there is something even more striking. The sounds so dissimilated are without exception what we must term the heavier or *more conspicuous* sounds: aspiratae, or even an entire syllable. Lighter or less conspicuous consonants must, therefore, be able to endure closer proximity to one another than the heavier or more conspicuous. Nor is that strange.

(18) Let us, for example, suppose that in some language every spoken word began with *d*. What would happen? Undoubtedly this *d* would cease to be a characteristic part of the word; the speaker, from laziness, would tend to neglect it (*Trägheitsgesetz*); the hearer, being accustomed to it would not insist upon clear pronunciation of it.

The result would be that the initial sound *d* would weaken to a more easily pronounceable dental, if it did not entirely disappear. The same weakening of *d* would take place if, instead of being everywhere initial, it were everywhere medial or final. Surely, no one will dispute this point.

But would it be necessary, in the stream of spoken language, that every spoken word had *d* initially, or medially, or finally, as the case might be, before it began to seem superfluous? Indeed, *d* in such circumstances would weaken if merely a large portion of the words had it.

But let us go further and assume that one half, or three fourths, or some other large fraction of the consonants in use were *d*'s, scattered, as you will, initially, medially, and finally. By this I do not mean one half or three fourths of the consonants of words in the dictionary, in which each word is counted but once, but one half or three fourths of the consonants of the words in a speech or long conversation taken stenographically; or, in other words, suppose that the one hundred most frequently used words contained *d* — for this entire thesis is concerned with language only as it occurs in the stream of spoken language.

Now, if there were as many *d*'s as one half or three fourths, they would doubtless tend to weaken. Hence, there must be some percentage in spoken language above which the *d* tends to weaken. What this upper threshold is, we do not know; but that it exists is at least quite probable. And if the Germanic *d* had passed such a proportion of frequency, that would be an excellent reason for its having weakened into the tenuis *t*.

Turning now to the next weakest dental, *t*, we find that this sound, being both less difficult to pronounce and less conspicuous to the ear, should, accordingly, be able to appear in spoken language much more frequently than *d*, without becoming so conspicuous in its repetition that it would cease to be a characteristic part of the word. But should it exceed its allotted percentage, it too ought to weaken. And if one were able to show the superfluity of *t* in Germanic, that would be an excellent reason for its having weakened into *p*. As we have argued about *t* and *d*, so we might continue, and show that each sound must have an upper threshold of frequency which it cannot pass without becoming weak.

But to reverse the argument. Let us suppose that there are only a few *t*'s appearing in spoken language, so few in fact that they are scarcely ever used. These would then become a distinctive and very characteristic part of the word, pronounced carefully by the speaker, heard distinctly by the hearer. Indeed, the inner accent (or *Hauptgestalt*) of the word would cluster about that *t*. It is, therefore, thinkable that the speaker in taking care to pronounce it distinctly would unconsciously add a following aspiration, or spirant, or some other increment of conspicuousness. For any *ts*, or *th*, which has arisen from *t*, clearly shows that the speaker had accented his *t* rather strongly. In other words, there is not only an upper threshold of frequency for, say, a *t*, but likewise a lower limen, below which the *t* will tend to take on a more conspicuous form. In such a manner an affricate or an aspirate may arise; or rather, in this manner a sound may assume a more conspicuous form. Now, if we can show that, in the Old High German dialect of Tatian for example, *t* had for some reason become infrequent, that would be an excellent reason for its having changed to the affricate *ts*, written *z*.¹

(19) We can measure the frequency-percentages of *t*, *d*, *p*, *b*, *k*, and *g* in modern languages. If the tenuous tend to be constantly more frequent in the stream of spoken language, we cannot demand a better proof of our theory.

But, before proceeding, let us remember one thing: the change of a tenuous, for example *p*, to its media, *b*, does not always mean that *p* has become infrequent. For a tenuous between two voiced sounds is obviously more difficult to pronounce, and, by way of contrast, more audible to the ear than a media; to produce it, the speaker must stop vibrating his vocal cords, pronounce the tenuous, then continue vibrating his vocal cords — an action more difficult than vibrating his vocal cords all the way through. Let us take as an example the Latin *ripa*, which fulfills this condition, and which later in Old Provençal became

¹ Incidentally, we may note that a good example of the overpronunciation of an unusual sound is offered by a person learning to speak a foreign tongue which has unaccustomed sounds. How the Germans caress an English *th*, and the Americans the German *chl*! As we have argued about *t*, so we may argue about all other consonants: each must have its upper and lower thresholds of frequency. Though this statement may sound exceedingly incredible, I shall none the less endeavor to demonstrate its truth.

riba. In the intervocalic position the *b*, which differs from *p* only in respect of voice, was obviously easier to pronounce. We must say that the *p* weakened into *b*, not because of the rareness of *p*, but because of the frequency of *p*. If the *p* had been a rarely occurring sound, it would have been so contributory to the *Gestalt* of the word, that the people of Old Provence would have pronounced it as *p* despite its being intervocalic. To word our theory so that it shall be true for such special conditions, we may say that *any assimilation points to the weakening of the assimilated sound, and this weakening is due to frequency*.

If, on the other hand, *t*, initially or not, in the neighborhood of voiced sounds took on voice and became *d*, where such voicing made it at once more difficult to pronounce and more audible to the ear, we must look upon this as a strengthening of the sound. Now, since our theory asserts that a strengthening of a sound is due to its comparative rareness, we must expect to find the sound so strengthened comparatively rare in occurrence. But the important point to remember is that each sound has *both an upper and lower threshold*. As it approaches the upper threshold, *ex hypothesi* it becomes "lenior"; as it approaches the lower, "fortior." Hence, should we find the media in some instances more frequent than the tenuis, we must first of all look for a weakening of the media toward a less conspicuous form. But we must not forget that a "lenissima" media may be less conspicuous than a "fortissima" tenuis, and therefore be more frequent. We may say that a media is more conspicuous than its tenuis, only when the media does not lose so much in intensity as to offset its increment of voice, or the tenuis does not gain so much in intensity as to compensate for its lack of voice.

(20) To get exact results in such an investigation, one should have only phonetic examinations of the spoken dialogue of uneducated people speaking a language uninfluenced by literary tradition. For obviously spelling often misrepresents the spoken word; written language differs vastly in style from the spoken; educated people confessedly strive to maintain their speech free from popular expressions and pronunciations which, if my theory is true, are at once the cause and result of *Lautverschiebungen*; and, finally, the literary language is so conservative that it may continue, like Sanskrit, so impervious to popular changes as, in the course of time, to appear a foreign tongue.

Among the ten modern languages the relative frequencies of whose consonants are given below, none have fulfilled these requirements. The French, English, Hungarian, and Swedish percentages are fairly exact phonetic measurements of the written language; in Bulgarian, a *Volkssprache*, the figures represent the frequency of printed letters; so too in Czech and German. The others have had only their written languages examined by a foreigner.

This, however, is not the only handicap. In working out the percentages of frequency I was obliged to treat all vowels, consonants, and diphthongs, not as varying amounts of abstract units of phonetic difficulty or acoustic conspicuousness, but as equal units; yet by definition a long vowel is more conspicuous than a short, and some consonants more so than others. But since the residue of sounds in a language remains constant for both the *tenuis* and the *mediae* of a language, in the comparative frequency of which alone we are at present interested, I have added all the vowels, consonants, and diphthongs together as so many equal sounds, and have then taken the percentages of the *mediae* and *tenuis* of the resultant totals. For the benefit of other students I shall, however, include the relative frequencies of these other sounds (that is, other than the *tenuis* and *mediae*) as given by the authorities quoted, using as far as possible their own sound-symbols.

(21) For French I have used F. Dujardin aîné, *Journal des Connaissances Usuelles* (1834), whose results are quoted on page 327 of Karl Faulmann, *Historische Grammatik der Stenographie* (Vienna: Bermann und Altmann, 1887), a copy of which is available in the Preussische Staatsbibliothek, Berlin.¹

¹ I was prevented from using the statistics of B. Bourdon, *Des Émotions et des Tendances dans le Langage* (Paris, 1892), because of the highly literary nature of the language he examined, ranging from Comte's *Système de politique positive* to Hugo's *Ballades*. Moreover, Bourdon was mainly interested in determining "des émotions et des tendances dans le langage," whereas Dujardin was intent solely upon determining for a system of stenography the actual frequency of sounds in French, for the ultimate purpose of saving money for French business men. Consequently, Dujardin examined a greater quantity of matter. If I use Bourdon's analyses of other languages, it is because of their completeness, since he elsewhere pursued a much less subjective method. In such instances I have included the results of others as a partial control.

Consonants			Nasalized Vowels		
t	634	6.28%	an	387	3.84%
d	356	3.55	ein	110	1.09
k	485	4.81	on	303	3.00
g	76	.76	un	27	.27
p	357	3.54	oin	12	.12
b	140	1.39		839	8.32%
l	380	3.77	Vowels and Diphthongs		
r	254	2.52	e	900	8.92
m	258	2.56	é	507	5.02
n	322	3.19	è	664	6.58
gn	15	.15	i	690	6.84
s	646	6.40	o	382	3.79
z	237	2.35	ou	241	2.39
f	145	1.44	u	274	2.72
v	222	2.20	eu	97	.97
ll	74	.74	a	674	6.68
ch	39	.39	oi	68	.68
j	99	.99		4,497	44.59%
h	19	.19			
x	10	.10			
gs	13	.13	Total	10,117	100.36% ¹
	4,781	47.45%			

Thus, that which we have assumed *a priori*, we actually find in the French language: the tenues are all more frequent than their corresponding mediae.²

¹ I have carried these percentages, as all others, to the second decimal place (though well aware that by such rough analyses mere hundredths are without significance) solely to avoid the necessity of interpolation.

² As a partial control of these figures I here quote from the bibliography on page 39 of F. W. Kaeding's *Häufigkeitswörterbuch der deutschen Sprache* (Steglitz bei Berlin, 1898):

"Thierry-Mieg, J. J. de Mulhouse: *Phonography à pente unique, Nouveau Système d'écriture abrégée* (Paris, Librairie de Firmin Didot frères, 1853).

"Unter anderem giebt Verfasser folgende Häufigkeitsreihe der Konsonanten

(22) For Russian (as well as for Spanish and Italian) I have used the results of B. Bourdon, *Des Émotions et des Tendances dans le Langage* (Alcan: Paris, 1892), pp. 80 ff.; the percentages for Russian are:

Consonants					
t	298	7.49%	c	129	3.25
d	136	3.42	j	44	1.12
k	139	3.49	q (x) guttural spirant	41	1.03
g	44	1.10	ī (i-cons.)	255	6.42
p	87	2.19		2,398	60.38%
b	70	1.76			
l	165	4.15			
r	188	4.75	y	58	1.46%
m	124	3.12	u	157	3.94
n	204	5.13	o	192	4.83
h and ñ	7	.17	i	251	6.31
s	239	6.01	e	273	6.86
z	63	1.58	a	650	16.30
f	17	4.20		1,581	39.70%
v	148				
f and v	165				
			Total	3,979	100.08%

der stenographischen Schrift: *r* 350; *s* 298; *t* 295; *m* 224; *k* 190; *d* 185; *l* 171; *n* 163; *v* 158; *p* 152; *j* 120; *f* 106; *z* 77; *ch* 47; *b* 45; *g* 16; *gn* 14; *ll* 10; *pr* 54; *tr* 50; *dr* 18; *kr* 17; *br* 16; *fr* 11; *vr* 9; *gr* 2; *pl* 24; *bl* 17; *gl* 9; *kl* 8; *fl* 6.

"Diese Reihenfolge ist gewonnen worden aus einer Zergliederung der ersten 3232 Worte des Werks: *Essai sur la vie et les travaux de Marie-Joseph, baron de Gerando, par Mlle. Octavie Morel*, also aus einem sehr kleinen Zählstoff.

"Professor Dr. Michaelis bespricht das Werk in seiner *Zeitschrift für Stenographie und Orthographie*, 1859, Seite 181: 'Das Verfahren welches dabei befolgt ist, scheint uns keineswegs eine solche Zuverlässigkeit zu bieten, dass wir darauf näher einzugehen uns veranlasst sehen könnten. Wie ungenau auch diese Zahlen sein mögen, so geht doch aus ihnen hervor, worauf es für die Stenographie der französischen Sprache besonders ankommt, deutlich das bedeutende Überwiegen der starken oder harten Laute *p, t, k*, über die weichen *b, d, g* indem jene im Durchschnitt beinahe dreimal so häufig sind als diese. Ferner erkennen wir aus diesen Zahlen, dass der Häufigkeit nach, wie dies im allgemeinen in fast allen Sprachen der Fall ist, die Laute nach den Organen in der Ordnung: linguale, labiale, gutturale sich folgen.'"

That which we postulated *a priori* we actually find again in Russian: the tenues are all more frequent than the mediae.¹

(23) For Czech I used the results of Professor Dr. Jos. Sedláček, in *Těsnopisnê Rozhledy* (Prague, 1924), pp. 65-66, which represent "die Verhältnisse der Worte und deren Teile in der Tcheckischen Sprache, ermittelt durch die Analyse von 18,000 Worten." The numbers following the letters give the number of letters per 100 words.

Consonants					
t	27	5.60%	j	11	2.28
d	18	3.73	c (ts)	6	1.24
k	19	3.93	ch	5	1.03
g	7	1.15	h	7	1.45
p	17	3.52	y	13	2.69
b	9	1.86		295	61.22%
l	22	4.56	Vowels		
r	15	3.11	e	46	9.52%
m	17	3.52	a	45	9.32
n	31	6.42	o	35	7.25
s	24	4.97	i	35	7.25
z	9	1.86	u	16	3.31
f	1	0.20	ě (pal.)	8	1.66
v	21	4.35	ou	3	0.62
š (pal.)	6	1.24		188	38.93%
ž (pal.)	6	1.24			
č (pal.)	5	1.03			
ř (pal.)	6	1.24	Total	483	100.15%

¹ As a partial control of Bourdon's phonetic analysis I offer P. Olkhin's statistical investigation of the occurrence of Russian printed letters as published in *Степно-эпиграф* (Moscow, Nr. 4-5, 1907), pp. 114-118, for which I am indebted to Mr. Alexander Iurkovskii of Moscow 19, Volkhonka 16, Ku. 7, who possesses a copy. The similarity of the results of Olkhin and Bourdon weakens, to my mind, the validity of the latter's as a *phonetic* examination. Nevertheless, the ratio of tenues to mediae is roughly what we expect. Olkhin's results: *t* 1502; *d* 738; *k* 851; *g* 416; *p* 337; *b* 357; *s* 1231; *z* 198; *v* 1131; *sh* (pal) 174; *zh* (pal) 201; *ch* (Eng. *ch*) 317; *shch* 100; *ts* 87; *kh* (Germ. *ch*) 219; *l* 880; *r* 948; *m* 817; *n* 1656; *e* 2475;

Again in Czech we find the *tenuis* more frequent than the *mediae*. There is, to the best of my knowledge, no other examination of Czech sounds with which to check these figures.

(24) For Bulgarian I used the results in *Обща Българска Знакова Мръжа на Писецитъ Машины*, No.2 (Sofia, 1908), p. 8, an analysis of the printed letters of 10,000 words. I am indebted to the kindness of Privat-Dozent Dr. Th. Goluboff, Ul. Schejnovo 27, Sofia, the author of this article, for my copy.¹

Consonants			sht (pal.)	351	.70
t	3,760	7.54 %	ts	201	.40
d	1,773	3.55	kh (Germ. ch)	200	.40
k	1,485	2.98		25,975	52.07 %
g	727	1.46	Vowels		
p	1,409	2.82	a	5,792	11.68 %
b	656	1.32	o	4,970	9.96
l	1,444	2.90	i	4,216	8.45
r	2,126	4.26	e	3,559	7.13
m	1,104	2.22	ъ	2,234	4.48
n	3,492	7.00	ѣ	1,377	2.76
f	48		ia	650	1.30
v	2,387		u	582	1.17
	2,435	4.88	ũ	213	.42
s	2,435	4.88	ŷ	195	.39
z	997	2.00	ь	129	.25
sh (pal.)	325	.65	iu	33	.06
zh (pal.)	475	.95		23,950	48.05 %
ch (pal.)	580	1.16	Total	49,925	100.12 %

o 2460; i 1710; a 1660; u 646; ia 516; y 419; ŷ 229; iu 178. It is regrettable that in so important a language we must content ourselves with statistics of such palpable inexactitude. The Russian letters are here transliterated according to the rule of the Library of Congress (Washington, D.C.).

¹ The Bulgarian letters are here transliterated according to the rule of the Library of Congress (Washington, D.C.).

If we can trust these figures, as I believe we can to a great extent, since Bulgarian is a *Volkssprache*, and, as I understand, the present alphabet corresponds phonetically in an unusual degree to the spoken sounds, these figures are exceedingly interesting. For the tenues show the startling ratio of exactly 2 to 1 to the mediae in each category. It is a great pity that there is no phonetic examination which might serve to control these figures. Yet even so, with so great a count as 49,925, these averages are significant, especially since the Bulgarian alphabet, possibly inexact elsewhere, is quite precise in the representation of its tenues and mediae.

(25) For Hungarian I used the results, as yet unpublished, of Herr Ludwig von Jakab (Budapest IX, Mesta-utca 37. II. 1), who with great kindness supplied me with a transcript of his statistics which he promises to publish soon.

Consonants

t	1,795	7.18%	s	518	2.10
d	510		z	627	2.56
dj	318		f	243	.97
	<hr/> 828	3.30	v	514	2.05
k	1,429	5.72	ś (pal.)	1,039	4.16
g	612	2.45	ž (pal.)	24	.10
p	259	1.04	ć (pal.)	114	.43
b	428	1.71	ts	55	.21
l	1,627	6.50	i-cons.	300	1.20
r	1,037	4.11	h	394	1.59
m	836	3.35	y	2	
n	1,438	5.74	tj	13	.05
nj	204	.82		<hr/> 14,336	<hr/> 57.34%
	<hr/> 1,642	6.56			

Vowels

a	2,291	9.16 %	u (short)	261	1.04
a (short)	932	3.72	u (long)	75	.29
	<hr/> 3,223	<hr/> 12.88		<hr/> 336	<hr/> 1.33
e (back)	1,969	7.86	ö (short)	326	1.30
e (short)	906	3.62	ö (long)	255	1.02
e (long)	1,048	4.18	ü (short)	196	.78
	<hr/> 3,923	<hr/> 15.66	ü (long)	34	.14
i (short)	1,092	4.37		<hr/> 10,682	<hr/> 42.66 %
i (long)	109	.43			
	<hr/> 1,201	<hr/> 4.80	Total	25,018	100.00 %
o (short)	965	3.86			
o (long)	223	.89			
	<hr/> 1,188	<hr/> 4.75			

Here again, save for the labials, which will be discussed later, the *tenuis* are more frequent than the *mediae*. This fact is for our theory especially important, since Hungarian is not an Indo-European language.¹ I hope the phonetic transcription, especially of the vowels, both here and elsewhere, will not unduly confuse the reader. My intent is simply to show the approximate categories of the remaining sounds; for their exact phonetic value, which is extraneous to this chapter on consonants, I refer the reader to phoneticists specializing in the particular languages concerned.

(26) For Swedish sounds I have selected the investigations, as yet unpublished, of Oberst a. D. Olof Melin, Arild (Skåne), Sweden,

¹ As a control of the excellent statistics of von Jakab, I offer the analysis of B. Bourdon in his *Des Émotions et des Tendances dans le Langage* of which he says (pp. 85 ff.): "Cette analyse a été fait sous le contrôle immédiat d'une personne parlant le hongrois de naissance, et par conséquent doit être considérée comme une des plus exactes de celles qui sont rapportées dans ce chapitre. Pour simplifier cependant, je ne distingue pas dans le résumé, qui suit, les voyelles ouvertes des fermées." *t* 341; *d* 164; *k* 194; *g* 123; *p* 30; *b* 76; *s* 77; *z* 109; *f* 54; *v* 89; *š* (pal.) 154; *ž* (pal.) 1; *l* 328; *m* 216; *n* 218; *r* 167; *ĩ* (i-cons.) 133; *ñ* (pal.) 36; *h* 71; *ü* 31; *u* 45; *e* 76; *ĩ* 163; *o* 274; *a* 550; *é* 673; Total 4,393.

to whose kindness I am indebted for them. They are a phonetic analysis of the language of parliamentary and business Swedish, for which reason, though excellent for Colonel Melin's contemplated system of stenography, they hardly approach the popular Swedish vernacular with such closeness as to make them of final validity for this thesis. None the less their ratios of tenues to mediae are significant.

<i>Consonants</i>			<i>Vowels</i>		
t	68,068	7.64 %	a	98,997	11.10 %
d	48,887	5.48	e	86,023	9.66
k	31,386	3.52	ě (short)	13,778	1.54
g	22,240	2.50	ā (long)	23,281	2.61
p	10,732	1.20	i	51,642	5.80
b	11,732	1.32	o	15,077	1.69
l	37,792	4.24	ö (short)	18,340	2.06
r	71,703	8.05	å	19,387	2.18
m	29,301	3.28	u	15,153	1.70
n	65,218	7.32	y	4,338	.48
ng	6,874	.77	ō (long)	16,160	1.81
s	50,426	5.66		<hr/> 362,176	<hr/> 40.63 %
f	19,723	2.21	Total	890,892	99.94 %
v	27,379	3.07			
sj	2,908	.32			
tj	1,307	.14			
h	12,119	1.36			
j	10,921	1.23			
	<hr/> 528,716	<hr/> 59.31 %			

Once more, except for the labials, about which more is to be said later, we find the tenues distinctly more frequent than the mediae.¹

¹ As a partial control of the Melin investigation, I offer the examination of Dr. Julius Braun of the consonants of 1,000 syllables of Swedish from an article on protective tariff in his *Entwurf und Begründung eines neuen Schulkurzschriftsystems und Schnellschrift* (Hamburg: Kommissionsverlag der Verlagsanstalt und Druckerei A. G., vormals J. F. Richter, 1888), pp. 84 ff. (a copy of this book is in the

(27) For Italian sounds I have taken the results of B. Bourdon in his *Des Émotions et des Tendances dans le Langage*, pp. 80 ff.

Consonants					
t	172	7.02 %	h	10	.4 %
d	116	4.74	i-cons.	80	3.27
k	89	3.63	u-cons.	23	.94
g	10	.41	ñ (pal.)	6	.3
p	68	2.78		1,357	55.45 %
b	22	.89			
l	134	5.47	Vowels		
r	148	6.04	u	78	3.18 %
m	76	3.11	i	208	8.49
n	153	6.25	a	246	10.04
s	100	4.08	o	255	10.43
z	25	1.02	é	311	12.7
f	22	.89		1,098	44.84 %
v	43	1.76			
ś	33	1.35	Total	2,455	100.29 %
ž	22	.90			
ll	5	.20			

Though it may be doubtful whether Bourdon's¹ examination is extensive enough to make his averages significant, yet, even as it is,

Preussische Staatsbibliothek, Berlin): *r* 201; *n* 182; *t* 159; *l* 117; *s* 108; *d* 94; *m* 79; *w* (*v*) and 6 *hw* 70; *k* and 4 *ch* 69; *f* 55; *g* 53; *nd* 32; *h* and 6 *hw* 32; *j* (and 13 *g* and 3 *hj*) 29; *ng* 27; *p* 24; *st* 22; *b* 21; *sk* 19; *nt* 7; *sch* (*ske*) 6; *mp* 3; *ˆ* (pal.) 2; *nk* 2; *x* 2; *tj* 1; *ž* (pal.) 1; these, when the double consonants are resolved, show the same general trend as the Melin figures.

¹ As a control I offer the statistics on Italian sounds by Dr. Julius Braun in his *Entwurf und Begründung eines neuen Schulkurzschriftsystems und Schnellschrift* (Hamburg, 1888), p. 85: *t* 88; *d* 59; *k* 55; *g* 5; *p* 49; *b* 14; *l* 122; *r* 121; *m* 43; *s* 87; *v* 49; *é* (pal.) 29; *f* 27; *z* 23; *ž* 21; *nt* 20; *nd* 11; *st* 9; *qu* 8; *mp* 7; *ś* 6; *lj* (*gl*) 5; *sk* 4; *nj* 3; *sp* 2; *h* 2; *i-cons.* 2; *nk* 1; *n* 108; these are sufficiently in accord with Bourdon to permit our believing that the tenues are more frequent than their mediae.

the Italian tenues seem much more frequent than their corresponding mediae.¹

(28) For Spanish I have adopted the examination of Bourdon:²

Consonants					
t	123	4.27 %	ð	7	.24 %
d	144	5.02	q (ch dur ou		
k	110	3.82	guttural)	18	.625
g	19	.07	ś (pal.)	9	.313
p	76	2.64	ñ (pal.)	7	.34
b	59	2.05	h	1	.03
l	186	6.46		1,607	55.32 %
r	194	6.74	Vowels		
m	66	2.29	u	52	1.81
n	175	6.08	i	141	4.90
s	224	7.78	o	252	8.75
f	14	.48	é	371	12.90
v	23	.8	a	456	15.80
i-cons.	104	3.61		1,272	44.16 %
u-cons.	15	.52			
þ	33	1.15	Total	2,879	99.48 %

Again in Spanish, save for the dentals, which will be later considered along with the Swedish and Hungarian labials, which likewise seem at first to refute the principle of frequency, the Spanish tenues are more frequent than the mediae.³

¹ Sr. Cav. Uff. Professor Dr. Guiseppe Aliprandi, Presidente della Accademia Italiana di Stenografia, Padua 11, Via Galilei 17, published an article "Ricerche sulle Frequenze," in the *Bollettino della Accademia Italiana di Stenografia* for 1928. Though his research was exhaustive, yet it was unfortunately restricted to Italian letters instead of sounds. Notwithstanding, his ratios of tenues to mediae are in favourable accord with Bourdon.

² *Op. cit.*, pp. 80 ff. But see p. 64, *infra*.

³ To control the Bourdon investigation, I here offer Dr. Julius Braun's analysis of 1,000 syllables of Spanish, as found in his *Entwurf und Begründung eines neuen Schulkurzschriftsystems und Schnellschrift* on p. 85: s 190; r 139; n 125; l 115; d 96; k (c) 87; m 68; t 44; z (ce) 44; p 34; b 31; nt 27; st 21; nd 20; f 19; v 19; g 17; sp 15; ch (j) 14; h 13; nj (pal.) 11; mp 9; lj (ll) 7; ng 6; é 5; j 2; nk 1.

(29) For English I have used the excellent phonetic analysis of 100,000 words made by Godfrey Dewey in his *Relative Frequency of English Speech Sounds*.¹ Since this book is easily accessible to others, I restrict myself to giving the consonants, together with their percentage of all the 372,729 sounds:

<i>Consonants</i>					
t	26,550	7.13 %	ž (pal.)	170	.05 %
d	16,050	4.31	č (pal.)	1,930	.52
k	10,100	2.71	ǰ (pal.)	1,630	.44
g	2,760	.74	f	6,860	1.84
p	7,620	2.04	v	8,490	2.28
b	6,750	1.81	ɸ	1,380	.37
l	13,930	3.74	ø	12,780	3.43
r	25,620	6.88	w	7,760	2.08
m	10,360	2.78	y	2,230	.60
n	26,980	7.24	h	6,755	1.81
ng	3,590	.96	Consonants	231,387	62.10 %
s	16,970	4.55	Vowels	131,719	35.32
z	11,070	2.97	Diphthongs	9,623	2.58
ś (pal.)	3,052	.82	Total	372,729	100.00 %

Again in English we find the tenues decidedly more frequent than the mediae. It would, indeed, be unkind to think of a possible control for these figures, which are so extensive in scope and so accurate in analysis. Yet even these cannot be said to represent any actually spoken language; nor was that the author's intent. Both the terms "English" and "Modern American" designate artificial languages which exist rather in spite of phonetic laws than because of them. Let us repeat again, that the present law of frequency can only be exactly demonstrated in an actually spoken dialect.

(30) For Modern German I was for some time at a loss. Though many analyses had been made of German letter-frequency, none had ever been seriously undertaken for German sounds. To be sure,

¹ Harvard University Press, Cambridge, 1923, p. 125.

Bourdon and others had made attempts in that direction, but their results were always vitiated by their counting the written media as the spoken media, a thing in German far from being the case: take, for instance, the actual pronunciation of words like *Tod*, *Herbst*, *Kind*, *Zug*. At last I resolved to undertake an analysis and redistribution of the frequency of German letters as determined by F. W. Kaeding in his *Häufigkeitswörterbuch der deutschen Sprache* (Steglitz bei Berlin, 1898), striving to include, as far as possible, in the totals for the tenues, also such tenues as might be written mediae. Taking then the table on page 646, I considered all initial mediae in the *Vorsilben*, *Haupt-(Stamm-)silben*, and *Nachsilben*, as mediae both written and spoken. All mediae appearing finally in the *Vorsilben* and *Nachsilben* I considered as tenues in pronunciation (*ab*-finden, *ab*-geben, notwendig, and so on), though written as mediae. There remained, therefore, only the final mediae in the *Haupt-(Stamm-)silben*, which may or may not be pronounced as tenues, according as they are or are not in absolute *Auslaut*, and, if not, varying with the nature of the sound that follows. Indeed, some final mediae under Kaeding's *Haupt-(Stamm-)silben* are always pronounced as tenues because of the nature of surrounding stem-sounds: *Herbst*, *selbst*, and the like.

Further, on page 34, Kaeding divides words into their syllables thus:

<i>Vorsilben</i>	9.98%
<i>Stämme</i>	65.06
<i>Nachsilben</i>	24.96
<hr/>	
Total for the German language	100.00%

In short, 24.96/65.06 or 38.5 per cent of the *Hauptsilben* are followed by some sort of *Nachsilben*. Therefore—after we have deducted those mediae which, owing to surrounding sounds, are always spoken as tenues regardless of a *Nachsilbe*—of those remaining, written mediae, according to the law of probability, 38.5 per cent will be followed by *Nachsilben*, while the remaining 61.5 per cent will stand absolutely final, and accordingly be pronounced as tenues. Therefore, if we can segregate those mediae which are always pronounced as tenues, and of the remaining take 61.5 per cent as standing absolutely final, we

can roughly reapportion the letter-frequencies so as to correspond approximately to the actual sound-frequencies. Such approximation will, of course, be very rough, since in many instances the mediae are also pronounced as tenues even before *Nachsilben*: *Mädchen* (*d*), *vorzüglich* (*g*), *strebsam* (*b*), and so on. But this error, such as it is, is weighted against my theory, since it adds actual tenues to the category of mediae. Hence, we may proceed convinced that whatever the results are, they are not unfairly favoring the principle of frequency.

Now, on pages 611-630 of Kaeding are given the *Auslaut Konsonanten der Hauptsilben* with their surrounding sounds. Examining these, I segregated, on the principle outlined above, the tenues from the mediae according to the neighboring sounds. For illustration I shall give my analysis of the letter *b*. Whenever I was in the slightest doubt, I placed the letters *b*, *d*, and *g* in the category of the mediae.

Written <i>b</i> and always pronounced as <i>b</i>		Written <i>b</i> and always pronounced as <i>p</i>		Written <i>b</i> , but varying in pronunciation	
bb	850	bs, b (s)	1,630	b	337,616
bbl	1	bsch, b (sch)	797	rb	31,261
bc	2	bst, b (st)	2,461	rbl, rbn	14
bd	9	bs (t), b (sts)	4		<hr/> 368,891
bg	2	bt, b (t)	28,435		
bj, bl, b (l)	2,801	b (ts)	208		
bn, b (n), b (ns)	223	kb	12		
br, b (r)	7,527	lb	40,160		
lbr, lb (r)	75	lb (s)	19		
mbr, mbs	90	lbst (l) (s)	20,578		
nb, nbl	10	lb (t)	147		
	<hr/> 11,590	mb	596		
		mbl	26		
		rbs, rb (s)	420		
		rbst, rb (st)	538		
		rb (t)	940		
		sb	32		
			<hr/> 97,003		

Check (sounds): Always <i>b</i>	11,590
Always <i>p</i>	97,003
Doubtful	368,891
Error.....	65
<hr/>	
Total printed <i>b</i> in Auslaut	477,549

Check (letters), Kaeding p. 646, Column 9:

Auslaut <i>b</i> Hauptstammsilbe	476,698
Auslaut <i>bb</i> Hauptstammsilbe	851
<hr/>	
Total printed <i>b</i> in Auslaut	477,549

The 368,891 doubtful cases of *b* represent German words whose *Stammhauptsilbe* ends in *b*; concerning what follows the stem in these cases we know nothing. According to the law of probability 38.5 per cent have some sort of *Nachsilbe* which, we shall assume, always causes the *b* to be pronounced *b*, though, strictly speaking, that is far from being true; while the remaining 61.5 per cent, having no *Nachsilbe*, are invariably pronounced as *p*. Or, in figures:

Redistributed <i>b</i>	142,023
Redistributed <i>p</i>	226,868
<hr/>	
Doubtful (total)	368,891

Let us now add together the *b*'s and *p*'s from all sources:

<i>b</i> Anlaut Vorsilbe	235,772
Anlaut Hauptsilbe	324,113
Anlaut Nachsilbe	15,218
Hauptstammauslaut: always	11,590
Hauptstammauslaut: redistributed	142,023
Error	65
<hr/>	
Total <i>b</i> -sounds in German	728,781

<i>p</i> All written <i>p</i>	193,293
All written <i>pp</i>	11,713
All written <i>sp</i>	66,028
<i>b</i> , Vorsilbenauslaut	91,420
<i>b</i> , Nachsilbenauslaut	5,480
Redistributed <i>p</i>	226,868
Written <i>b</i> , always pronounced as <i>p</i>	97,003
All written <i>mp</i>	13,689
<hr/>	
Total <i>p</i> -sounds in German	705,494

The same procedure I followed with regard to *g* and *d*. By splitting up those double letters given by Kaeding on page 646, which actually represent two different sounds (as *nd*, *sp*, *st*, and so on), and by adding the individual sounds together, plus 21,023,877, the number of vowels and diphthongs given on page 643.3.a, and getting 54,322,441 as the sum total of all German sounds, I then took the percentages as given below. I need not point out that such an analysis is exceedingly crude; yet such error as it contains is in every detail weighted against my thesis. Even so, while acknowledging that every tenuis I counted is pronounced as a tenuis, though despite my redistribution many sounds still counted as mediae are actually pronounced as tenues, the reader may wonder why I include such crude evidence at all. To this I answer simply, that I would rather include this interpolated evidence, inexact and weighted against my theory as it is, than by neglecting mention of so important a language as German, run the risk of overlooking a possible disproof of my thesis. For all said and done, the rough redistribution does show the general relationship of tenues to their mediae, which it is here our purpose to demonstrate. The actual percentages, however, are additionally untrustworthy,¹ because the total of supposed German sounds include many which are merely orthographic.

¹ For a brief yet fair criticism of Kaeding's *Häufigkeitswörterbuch*, see B. Q. Morgan: *German Frequency Word Book based on Kaeding's Häufigkeitswörterbuch der deutschen Sprache*, Publications of the American and Canadian Committees on Modern Language, X (New York: Macmillan, 1928), vii ff.

Consonants					
t	3,484,437	6.42 %	ch	1,347,417	2.48
d	2,037,712	3.75	pf	43,113	.08
k	1,218,057	2.24		33,298,564	61.24 %
g	996,592	1.84			
p	705,494	1.30	Vowels		
b	728,781	1.34	e	9,260,044	17.6 %
s	2,595,706	4.78	i	3,378,881	6.22
f	1,432,028	2.64	a	2,659,781	4.90
v	1,062,833	1.95	u	1,694,672	3.12
ś	1,149,687	2.12	o	1,276,077	2.35
l	1,851,315	3.41	ei }	1,215,041	2.24
r	4,899,656	9.02	ai }		
m	1,433,161	2.64	au	449,083	.83
n	5,679,663	10.40	ü }	429,956	.79
j	118,619	.20	y }		
h	1,277,970	2.35	ä	324,469	.60
ng	451,676	.83	ö	183,448	.34
qu	10,221	.02	eu }	152,215	.28
x	9,337	.02	äu }		
y	76		ey }	210	—
tz (z, c)	765,013	1.41	ay }		
				21,023,877	39.27 %
			Total	54,322,441	100.51 %

Save for the labials, which will be discussed later when we come to consider those ratios which are not in accord with our theory, the tenues are again more frequent than the mediae.

(31) In addition to these ten modern languages I thought it prudent to add examinations of Rigvedic Sanskrit, Platonic Greek, and Ciceronian Latin.

For the *Rigveda* I shall use W. D. Whitney's percentages for 10,000 sounds, as published in his article "On the Comparative Frequency of Occurrence of the Alphabetic Elements in Sanskrit."¹

¹ *American Oriental Society Journal*, X (1880), *Proceedings* at New York (October, 1877), cl ff.

t	6.65 %	m	4.34 %
d	2.85	r	5.05
dh	.83	l	.69
th	.58	s (dent.)	3.56
k	1.99	ś (pal.)	1.57
g	.82	ṣ (cerebral)	1.45
gh	.15	ḥ (visarga)	1.31
kh	.13	h	1.07
p	2.46	v	4.99
b	.46	y	4.25
bh	1.27		<hr/> 56.48 %
ph	.03		
ṭ	.26		Vowels
ḍ	.21	a	19.78 %
ḍh	.03	a (long)	8.19
ṭh	.06	i	4.85
c	1.26	i (long)	1.19
j	.94	u	2.61
jh	.01	u (long)	.73
ch	.17	ṛ	.74
n (dent.)	4.81	ṛ (long)	.01
n̄ (anusvara)	.63	ḷ	.01
ṇ (cerebral)	1.03	e	2.84
n̄ (pal.)	.35	ai	.51
ṇ (gut.)	.22	o	1.88
	<hr/> 7.04 %	au	.18
			<hr/> 43.52 %

These figures are particularly interesting because, except for the one sound *b*, they show clearly that the mediae aspiratae, as first postulated (see above, §§ 15, 17), are less frequent than the mediae, the mediae less frequent than the tenues, and the tenues aspiratae less frequent than the tenues.¹

¹ I here call attention to E. Förstemann's "Numeralische Lautbeziehungen des Griechischen, Lateinischen, und Deutschen zum Sanskrit," *Zeitschrift für Vergleichende Sprachforschung*, II (1853), 36 ff. Since Förstemann specifies neither what

(32) From this point on, for the want of sufficiently exact investigations of others in sound or letter frequency, I am obliged to offer statistical analyses made by myself. I have taken as a sample of Attic Greek certain parts of the Platonic dialogues which seemed both to me and to others especially suitable for analysis because of their popular style. My count, which covers 10,000 Greek letters (that is, diphthongs considered as one letter, geminatae as two) divides itself as follows: (a) the first 3,000 letters of direct discourse of Plato's *Phaedrus*¹ and (b) 7,000 letters from *Crito*.²

Of the 10,000 letters, 4,783 or 47.83 per cent were vowels and diphthongs which I did not count individually, since the present thesis will in no way use the Greek vowels. For convenience in reckoning I considered ξ, ψ, and ζ as single sounds, since their percentages are so small as to be negligible.

Consonants

τ	758	7.58%
δ	287	2.87
θ	136	1.36
κ	407	4.07
γ	174	1.74
χ	77	.77
π	338	3.38
β	49	.49
φ	75	.75
λ	197	1.97
ρ	351	3.51
μ	319	3.19
ν	855	8.55

ξ	51	.51
ψ	9	.09
ζ	21	.21
σ	649	6.49
ν (γ)	10	.10
h (asper)	254	2.54

Geminatae

λλ	87	.87%
μμ	4	.04
νν	3	.03
σσ	2	.02
ττ	4	.04
	5,217	52.17%

Sanskrit texts, Vedic or Classic, he examined, nor how extensive a count his percentages represent, I do not see how his results may be used as a control of Whitney's study, even though, these factors considered, they do not vary widely.

¹ Chapters I, II, III, and the first line of chapter IV through 'Αλλ' εἰ, κτλ. (*Platonis Convivium — Phaedrus*, ed. by C. Fr. Hermann, Leipzig: Teubner, 1925).

² Chapters I, II, III, IV, VI beginning with *Crito*: καλῶς κτλ. to the end of chapter VII, VIII, IX, and X through τὶ δέ; ἀντικακουργεῖν κακῶς πάσχοντ' (*Plato, Apologia, Crito*, ed. by C. Fr. Hermann and M. Wohlrab, Teubner).

Here, as elsewhere, we find the tenues distinctly more frequent than the mediae; and, as we assumed previously, the tenues, with no exception, are more frequent than the tenues aspiratae.¹

(33) For Ciceronian Latin, I counted 10,000 letters, considering, as in Greek, the diphthongs as single, the geminatae as double sounds. Taking *Ciceronis Epistulae II, Epistulae ad Atticum, Pars Prior, Libri I-VIII* (Oxford: Clarendon Press, 1903), I selected at random Book I, Letters 16, 3, and lines 1-3, through *Nunc vero sentio. . . .* of Letter 4. Of the 10,000 letters 5,277, or 52.77 per cent, were consonants, 4,723, or 47.23 per cent, vowels. Not here being concerned with the vowels, I did not count them singly.

Consonants

t	772	7.72 %	x	42	.42
d	341	3.41	th	3	.03
k	371 173 } 544	5.44	ph	2	.02
qu			ch	2	.02
g	96	.96		5,153	51.53 %
p	201	2.01			
b	140	1.40			
m (final)	327	3.27			
m (not final)	255	2.55			
m	582	5.82			
n	647	6.47			
r	539	5.39			
l	228	2.28			
h	62	.62			
f	91	.91			
s	676	6.76			
i-cons.	68	.68			
u-cons.	117	1.17			

Geminatae

kk	6
tt	1
pp	1
ff	3
mm	3
ll	18
rr	5
ss	25
	62

¹ E. Förstemann likewise determined the frequency of letters in the Attic dialect without naming the author examined or the amount counted. His percentages, which do not vary considerably from mine, may be used as a partial control (*Kuhns Zeitschr.*, I (1852), 163 ff.).

Here as elsewhere, we discover that the tenues tend to be more frequent than the mediae.¹

(34) To make the ratios given above more convenient for examination, a tabulation of the tenues with their respective mediae would be useful. The four instances which we have noted, where the individual media seems to be more frequent than its corresponding tenuis, I will italicize for convenience in subsequent reference.

	t	d	k	g	p	b
Bulgarian	7.54 %	3.55 %	2.98 %	1.46 %	2.82 %	1.32 %
English	7.13	4.31	2.71	.74	2.04	1.81
Russian	7.49	3.42	3.49	1.10	2.19	1.76
Italian	7.02	4.74	3.63	.41	2.78	.89
Swedish	7.64	5.48	3.52	2.50	1.20	1.32
Hungarian	7.18	3.30	5.72	2.45	1.04	1.71
German	6.42	3.75	2.24	1.84	1.30	1.34
French	6.28	3.55	4.81	.76	3.54	1.39
Czech	5.60	3.73	3.93	.15	3.52	1.86
Spanish	4.27	5.20	3.82	.07	2.64	2.05
Sanskrit	6.65	2.85	1.99	.82	2.46	.46
Greek	7.58	2.87	4.07	1.74	3.38	.49
Latin	7.72	3.41	3.71	.96	2.01	1.40
Average	6.81 %	3.84 %	3.58 %	1.15 %	2.38 %	1.37 %

This result is indeed startling. Despite the roughness of the examination, we see that *t*, for example, tends to hover about 7 per cent of the language; *d* around 3.5 per cent; *k* around 3.5 per cent; and so forth. Bulgarian, as has been said, shows the very startling ratio of 2 to 1. From the actual Bulgarian percentages the English percentages vary but slightly. Surely it is clear that the tenues tend to be more frequent than the mediae.

But what is most amazing is that this ratio persists in languages most widely separated from one another by time and space, many

¹ E. Förstemann likewise determined the frequency of letters in Latin, without naming the author examined, or the amount counted. His percentages, which vary but slightly from mine, may be used as a partial control; cf. *Kuhns Zeitschr.*, I (1852), 163 ff.

of which have undergone devastating sound-shifts. Latin *t* and French *t*, roughly speaking, go back to Indo-European *t*; English *t* goes back roughly to Indo-European *d*; whereas German *t* is made up largely from Indo-European *dh* with a substantial addition from *d* and *t*. Yet in all these languages the superior frequency of the *t* is apparent. If the absolute percentages vary somewhat, that is what we expect, first, from the varying number of different consonants at the disposal of different languages; second, from the differing positions of articulation of the sounds; and finally, from our upper and lower thresholds of conspicuousness. Some of these *d*'s are *fortes*, others are *lenes*; and it is certainly safe to say that more exact phonetic measurements of purely colloquial dialogue would give us correlations even more startling than these. Nor can we here fail to observe that Hungarian, a non-Indo-European language, seems to follow the same law, thus indicating that our principle of frequency obtains not only for Indo-European tongues, but for post-primitive speech in general.

Of the thirty-nine groups of *tenuis* and *mediae* in the thirteen languages examined, four alone, or roughly 10 per cent, show a preponderance of *mediae* over *tenuis*: I refer to the Hungarian, Swedish, and German labials, and the Spanish dentals. Since we see that 90 per cent of the cases obey the principle of frequency, let us now turn to the remaining 10 per cent.

(35) Concentrating our attention on the labials, we observe at once that it is not *b* which is over-frequent, but *p* that is over-rare. For by comparison with the other languages we see that *b* tends to hover roughly about 1.4 per cent, from which the Hungarian with 1.71, the Swedish with 1.32, and the German with 1.34 per cent differ too slightly by such inexact statistics to warrant further consideration. It may be suggested by the reader that since *b* was undoubtedly very rare in pro-ethnic-Indo-European, *p* should accordingly be rare in Germanic. That, to be sure, might, by a great stretch of the argument, explain Swedish. But it cannot explain German, since Old High German shifted into affricates, and later double spirants the Germanic *p*'s derived from the Indo-European *b*'s. Consequently, one might search modern German with a lantern without finding even a few examples of *p* from Indo-European *b*. Hungarian likewise refutes such a supposition, for, not being an Indo-European tongue at all, its consonants

could not have been greatly influenced by the Indo-European order of things.

Hence, there remain only two other possible solutions (see § 19): either (a) that the *p*'s through their frequency have been assimilated to adjacent sonants (for example, Latin *ripa*, Old Provençal *riba*); or (b) that the upper threshold of a *b* may be less intense or conspicuous than the lower threshold of a *p*; that is to say, a *fortis p* may be more difficult to pronounce and more audible to the ear than the *lenis b*.¹

Since we have no marked law in modern German for the assimilation of *p*'s to voiced sounds, it follows that the first alternative cannot be the cause of their paucity. Then, if our theory be true, the German *p* must be *fortis*, the German *b* *lenis*. That such is the fact is very well known. A German in pronouncing a *p* often adds an accompanying aspiration; whereas, for example, in pronouncing the English phrase "bad boy," he invariably utters what an Englishman hears as "pat poy." Hence the superior frequency of German *b* to *p*, far from vitiating our theory, adds another proof.

Similar is the explanation of the phenomenon observable in Leipzig, where *p* and *b* have fallen together into a labial sound which, strictly speaking, is neither. The same phenomenon happened there with the other mediae and tenues (*begleiden* may mean *begleiten* or *bekleiden*); for, as we observed, if all written mediae were truly pronounced as mediae, they would be vastly more frequent than the tenues.² In some parts of Germany the speakers unvoiced the mediae in the most convenient positions — namely, the beginning (Notker's *Anlautgesetz*³) and the end of words. In the neighborhood of Leipzig the two

¹ Of course, both of these conditions may, at least theoretically, have operated simultaneously.

² See F. W. Kaeding, *Häufigkeitswörterbuch der deutschen Sprache* (Steglitz bei Berlin, 1897), p. 647, column 21.

³ Wilhelm Braune: *Althochdeutsche Grammatik* (Halle: Niemeyer, 1923), pp. 86 ff., § 103. "Bei N[otker] wechseln die anlauten *p-b, k-g, t-d* derartig, dass *p, k, t* steht: 1. am anfang eines satzes (oder satzteils); 2. im satze, wenn das vorhergehende wort auf einen stimmlosen laut endigt." That this *Anlautgesetz* is an individual dialectal peculiarity, and not a general linguistic tendency, as some scholars assume, is clearly shown by the following Sanskrit law of *Sandhi* covering precisely similar conditions with opposite results: "In external combination . . . an initial

sounds fell together. Thus we have a possible explanation of the labials of modern German. I leave an explanation of the Swedish and Hungarian labials to someone who has a better opportunity than I for studying objectively the actual phonetic intensities. Yet I hazard the guess, which inquiry seems to substantiate, that the same condition of *lenis-fortis* obtains there also.

(36) Let us now turn to the case of the Spanish dentals, which with *t* at 4.27 and *d* at 5.02 per cent seem to offer a disproof of our theory, though in reality they add another support. For if 5.02 per cent represents the frequency of *d* in Spanish, we may with certainty assume that it has crossed the upper threshold, especially since it is almost 25 per cent more frequent than the Spanish *t*. We should, accordingly, expect that in Spanish the *d* would lose one of its increments of conspicuousness, either its voice, or explosive quality, or both. This is actually the case. According to T. Navarro Tomás, *Manual de Pronunciación Española* (Madrid, 1918), pp. 75 ff., only in the absolutely initial position, or when preceded by *n* or *l*, is the written Spanish *d* pronounced as a media, and then only *lenis*. Elsewhere it has taken on a spirantic quality, losing the increment of explosiveness as postulated above. In many cases,¹ the spirant is so weak as to be neglected entirely in the vulgar pronunciation current in the greater part of Spain. Examples of this phenomenon may be had by consulting the work cited above. *b* likewise, with 2.05 per cent, the highest percentage in the entire list, always has a spirantic quality.

(37) Before leaving these thirteen languages let us consider their liquids and nasals:

sonant of whatever class . . . requires the conversion of a final surd to a sonant" (Whitney, *op. cit.*, p. 54, § 157 c). Take the dentals as an example: O. H. G. *ist daz* appears in Notker as *ist taz*; but Sanskrit *āsīt dāsaḥ*, 'there was a slave,' becomes *āsiddāsaḥ*.

¹ Tomás, *op. cit.*, pp. 77-79.

	m	n	l	r
French	2.56 %	3.19 %	3.77 %	2.52 %
Russian	3.12	5.13	4.15	4.75
Czech	3.52	6.42	4.56	3.11
Bulgarian	2.22	7.00	2.90	4.26
Hungarian	3.35	5.74	6.50	4.11
Swedish	3.28	7.32	4.24	8.05
Italian	3.11	6.25	5.47	6.04
Spanish	2.29	6.08	6.46	6.74
English	2.78	7.24	3.74	6.88
German	2.64	10.40	3.41	9.02
Sanskrit	4.34	7.04 (all)	.69	5.05
Greek	3.19	8.55	1.97	3.51
Latin	5.82	6.47	2.28	5.39

That *r* should in no way agree among the languages is at once clear when we consider that in some cases *r* is uvular, in some trilled, in some vocalic, or now pronounced distinctly, now again so lightly that it is almost unnoticeable. Since each variety has its varying degree of conspicuousness and difficulty of pronunciation, we cannot apply our theory here. Too great a frequency would undoubtedly cause a weakening, even to the vanishing point, as is the case perhaps in certain positions in English. But, owing to this very difference in the nature of the sounds, we cannot use them for purposes of comparison. So, too, *l* has various manners of pronunciation. Perhaps ultimately the tendency in Indo-Iranian of *l* and *r* to fall together in one category or the other was due directly to the frequency or infrequency of one or both. But this fact is not demonstrable from existing data.

On the other hand the *n* is by definition ¹ dental, and the *m* labial. Though the exact position of articulation may vary from language to language, and likewise their intensity, yet the nasals do not admit so widely varied pronunciations as the liquids. Accordingly, in the table above, we find with few exceptions that *m* hovers around 2.75 per

¹ Because of the confused orthography of many languages in this very point, the column of dentals given above in some cases includes palatal and guttural nasals. But their percentage is so slight that in such rough statistics they are virtually imperceptible.

cent and *n* around 6.5 per cent. To this statement the French and German *n* and the Sanskrit and Latin *m* offer exceptions.

(38) Why now should the French *n* be so infrequent? The French nasalized vowels (*an, ein, on, un, oin*, and the rest) constitute, according to Dujardin, whose results are given above, 8.31 per cent of all spoken French sounds. Since these nasalized vowels in virtually all cases developed from dental nasals, we may assume that before the historic French nasalization these dental nasals which were later nasalized would alone constitute roughly 8.31 per cent of French sounds.¹ In addition to these, there were dental nasals roughly to the amount of 3.19 per cent, which for one reason or another have maintained themselves until present times. Now the sum total of these two categories, 11.50 per cent, representing roughly the percentage of dental nasals before the nasalization, is almost 50 per cent more than in most of the other languages. In other words, before the French nasalization, roughly every ninth sound was an *n*. Hence, it is not over-bold to say that, owing to this very frequency, the French dental in many places weakened, losing its individual form to merge with the adjacent vowel. And if at one time nasals weakened, having passed the upper threshold, so now, after having receded below the lower, they compensate in the other direction, becoming more distinctly and intensely articulated to compensate for their loss in frequency. As they are rarer in occurrence than the English *n*, so too, as is most apparent to anyone hearing French, they are more intensely pronounced.

German offers a similar state of affairs. With *n* at 10.4 per cent, it is not at all surprising that dialectally the *-n* is beginning to vanish, as in "Sie ham gesunge" for "Sie haben gesungen," or "Ich fahre mit de achte" for "Ich fahre mit der achten (Strassenbahn)." One may say that such dropping of *-n* occurs only in popular speech. True, but it is in popular speech that sound-changes first manifest themselves; though in regard to the dropping of *-n*, I have heard many a sedate German consistently though unconsciously do it.

¹ It is not necessary to point out that by adding these nasals in the nasalized vowels as extra sounds one increases the sum total of French sounds, thereby reducing all individual percentages. Consequently, the percentage of nasals which later become nasalized vowels, would be a smaller part of the whole language at that early time, than the present resulting nasalized vowels of present French. This qualification is to be understood, here as elsewhere, by the word "approximately."

Latin, with its superior number of *m*'s offers a convincing explanation of the mutation of final Indo-European *m*. Without troubling the reader's patience with a complete enumeration of all the languages where the final *m* became *n* or was lost, I do point out that it was consistently preserved in Latin: Latin *equum*, "horse," goes back to Indo-European **ek̑um*. The question now arises, which is the more difficult to pronounce and which more conspicuous to the ear, *n* or *m*? If we might for the nonce assume the principle of frequency, we could at once say that the *n* is less conspicuous because it is more frequent. But even without assuming the principle of frequency we can demonstrate the same truth. To make the question more concrete, when the Greek accusative singular **ἵππομ* became ἵππον, did the *-μ* weaken into *-ν* or strengthen into *-ν*? It must have weakened into *-ν*, since the Greek *Auslautgesetze* (loss of final consonants) show a thorough-going tendency toward weakening and not strengthening. Similarly, did Germanic **quom* weaken into Gothic *hwan* or strengthen? Patently it must have weakened, for the weakening continued right through until the nasal was completely lost: Germanic accusative singular **stainam* > **stainan* > Runic *staina*, Gothic *stain*. It would be quite absurd to maintain that this change was not a consistent and continuous weakening until the ending was completely gone. As in these two cases, so elsewhere.¹

When we observe that in practically all the Indo-European dialects final *m* tended to weaken, we must assume that even in pro-ethnic Indo-European times *-m* had begun to cross its upper threshold. After the break-up into dialects, this tendency so far continued that in most languages it actually did cross the threshold, and, according to our principle of frequency, weakened. Now Latin, maintaining its *-m* down to historical times, shows a percentage not only definitely greater than in other ancient languages,² but likewise greater than is to be found in the ten modern languages examined, including the Hungarian. But at last it too obeyed the principle of frequency, and weakening in the

¹ For example, in Middle English, as has been ably shown by Prof. Samuel Moore, "Earliest Morphological Changes in Middle English," *Language*, IV (1928), 240 ff.

² It is to be remembered that the maintenance of final *m* was largely merely orthographic.

Auslaut finally vanished. By consulting paragraph 33 above, we find that 327 of the 582 *m*'s in 10,000 letters of Ciceronian Latin stood absolutely final. When these disappeared, as they had begun to do before the time of Plautus, the percentage fell from 5.82 to 2.55, bringing it within the thresholds between which it could maintain itself. So too in Sanskrit, the *m* had crossed the upper threshold, and accordingly tended to weaken, passing into *anusvara* before a following sibilant.

From these examples it seems to be very clear that the nasals too obey the principle of frequency. For it cannot be by chance that *n*, which is less conspicuous and more easily pronounceable than *m*, is in thirteen different languages likewise more frequent. Nor can it be by chance that, whenever *m* or *n* does vary roughly from the mean percentage, a weakening has either just taken place, or is about to set in. Perhaps the reader will retort: "Of course final *m* weakened, but that was due to a general weakening of inflectional endings." Indeed, so it might well be argued about many instances, with apparent reason. But let us not forget that the Greek accusative singular ἵππον is still as inflected as before; the change from *ἵππομ to ἵππον did not make the word less inflected, though it did make the ending less conspicuous. So, too, with the Runic accusative singular *staina*.

(39) Though the cause of many other sound-changes is apparent from these data, such as the instability of Indo-European *s*, which, doubtless because of its frequency in inflectional endings and suffixes, must have crossed its upper threshold in late Indo-European times and, accordingly, in Sanskrit, Greek, Latin, Germanic, had either disappeared in part, or showed a decided tendency toward assimilation, still I prefer to restrict myself for the present to those sound-changes which were thorough and far-sweeping, and which have in particular caused endless speculation on the whole subject of linguistic mutation.

Let us then turn to the first great sound-shift in Germanic, formulated in Grimm's Law.

(40) According to Grimm's Law the Indo-European *tenues* and *tenues aspiratae* shifted in all but a few positions to their corresponding spirants:

$$\begin{aligned} t, th &> þ \\ p, ph &> f \\ k, kh &> x \end{aligned}$$

The mediae shifted in all positions to their respective tenues:

$$\begin{aligned}d &> t \\b &> p \\g &> k\end{aligned}$$

The mediae aspiratae shifted, depending upon their position, either to their mediae or to their voiced spirants:

$$\begin{aligned}dh &> d, d \\bh &> b, b \\gh &> g, 3\end{aligned}$$

Though this is a rough statement of Grimm's Law, yet it is adequate for our present purpose.

Why did these changes take place? The causes suggested by theories hitherto advanced range from malformation of the mouths of Germanic children to climatic conditions as on the plateaus of Armenia, including possibilities of *Sprachmischung* and the like. But the present thesis maintains that the changes enumerated under Grimm's Law, like other sound-changes, were due to conditions within the language itself. For, if we look at the three changes that took place, we are at once struck by their similarity: in all cases the consonants became less conspicuous. The tenues lost their increment of explosion, the mediae their increment of voice, the mediae aspiratae either their increment of aspiration, or else both aspiration and explosion. In fact, the Indo-European explosives were made less conspicuous in Germanic. This point cannot be disputed.

But if the principle of frequency be true, it follows that all the explosives in Germanic had become too frequent; that is, that the explosives as a whole occurred so often that there was no longer the need of pronouncing them as conspicuously as heretofore. It is perhaps fitting to point out further that the whole shift could and did take place without leading to any confusion of words and their meanings, because of its complete substitution of new sounds for the old. But since this change took place before the writing of Germanic dialects, it is unfortunately impossible for us to examine the frequency of the explosives either before, during, or immediately after the sound-shifts. What, then, can we examine?

The first pieces of prose literature of any extent even remotely approaching popular speech are separated by almost a thousand years from the period when the changes described by Grimm's Law took place. During those ten centuries new and obliterating changes occurred: many consonants were either changed (Verner's Law) or completely lost; the Romanized or Christianized peoples were using a vocabulary vastly different from that of the heathen Germans. In the face of such obstacles any examination of the cause of Grimm's Law in the light of our principle of frequency seems at first sight like quixotic temerity.

Yet let us approach the problem as follows. We can now argue from the principle of frequency that, if a given sound-change had not taken place, the sound, all other things remaining equal, would be found above the upper or below the lower threshold of frequency, as the case might be. So too with Germanic. If we can show that, in some Germanic language, *b*'s for example, in addition to such *t*'s as remained unshifted in Germanic (e.g., *st*), greatly surpass in their frequency the upper threshold of *t* as demarcated by the thirteen languages already examined, we may safely assume that the Indo-European *t* tended to cross the upper threshold in primitive Germanic times. This is especially true since *b* has subsequently passed, in certain instances, notably under Verner's Law, into an entirely different category.

No Germanic dialect preserved its consonants so well as Old English, and few possess such old monuments. Yet here again we meet the old problem of just what is sufficiently popular in style to justify examination. We cannot take poetry, for that is obviously artificial; we cannot take the chronicle, or other historical or descriptive pieces, for these, written largely in the preterite, would, through the action of Verner's Law, give an unduly false picture. After discussion with friends I decided upon King Alfred's translation of Boethius, selecting those passages which were in direct discourse. When one considers the artificial and philosophical nature of the *De Consolatione*, and the fact that it is a translation of a much older, and of a foreign work but imperfectly transmitted to us, one must admit at the outset that our chances of demonstrating our principle are but slight. Yet here as elsewhere things may not turn out so badly as we fear, for, if the Germanic sound-shift was really due to frequency, unmistakable traces

of the law of frequency must be still discernible, even a thousand years later.

Taking Mr. Walter John Sedgefield's *King Alfred's Old English Version of Boethius de Consolatione Philosophiae*,¹ I selected portions of direct discourse scattered throughout the book in passages long enough to avoid the appearance of making a prejudiced selection, yet numerous enough for variety of language. They are pages 13, 59, 87, 88, 106, 107, 137, 138, and page 10 through *beréafap*, *þonne he* in line 7. The variations in percentages from page to page were only slight.

By considering diphthongs as individual units as in Greek and Latin, but counting geminatae (except as specified below) as double sounds, since they originally represented two distinct sounds in pro-ethnic Germanic, I counted a *total* of 11,000 sounds; in reckoning the number of *individual* explosives, however, I counted the geminatae as one sound, since the gemination undoubtedly occurred much later than the sound-shift described by Grimm's Law, as is attested by its absence from Old Norse and Gothic. For example, I counted *dd* as two sounds for the total, since it almost invariably goes back to two pro-ethnic Germanic sounds; but I counted *dd* as one sound in the *d*-column, since only one of these sounds was an original *dh*. To be explicit, gemination frequently arose from a following *ȝ*-consonant. Thus we set any possibility of error *against* our thesis. Moreover, in making my percentages I included the tenues of *sk*, *st*, and *sp* among their respective spirants, *h*, *þ*, and *f*, since their presence added to the frequency of the tenues before the change, even if the *k*, *t*, and *p* when combined with *s*, and *t* when preceded by *k* or *p*, did not themselves shift. Naturally the percentages do not represent the frequency of individual sounds in Boethius, but rather their calculated frequency, as far as we can determine it, if they had remained unshifted. The sign *þ* represents *þæt*; 7 is *and*. As I make no use of the vowels in this part of my paper, I omit their differentiation, which in Old English would be especially speculative.

¹ Oxford: Clarendon Press, 1899.

b	b	926		b	b	82	
	bb	15			bb	<u>16</u>	
	baet	160				98	.89%
	st	<u>90</u>					
		1,191	10.82%				
t	t	304		l	l	298	
	tt	3			ll	<u>47</u>	
	baet	<u>160</u>				345	3.14
		467	4.24				
d	d	324		m	m	315	
	dd	3			mm	<u>1</u>	
	and	<u>86</u>				316	2.87
		413	3.75				
h	hw	56		n	n	685	
	h	373			nn	57	
	hh	1			and	<u>86</u>	
	sk	<u>21</u>				828	7.53
		451	4.1				
k	k	381		r	r	389	
	kk	<u>3</u>			rr	<u>2</u>	
		384	3.49			391	3.55
g	g	372	3.38	w	w	421	
	cg	4	.03		hw	<u>56</u>	
f	f	212				477	4.34
	sp	<u>11</u>					
		223	2.03				
p	p	10		s	s	483	
	pp	<u>1</u>			ss	12	
		11	.10		sp	11	
					st	90	
					sk	<u>21</u>	
						617	5.61

Geminatae

ss	12	pp	1		
rr	2	cg	4		
nn	57	kk	3		
mm	1	hh	1		
ll	47			165	1.49 %
dd	3	Total	6,753		61.36 %
tt	3	Vowels	4,247		38.60
þþ	15				
bb	16	Total Sounds	11,000		99.96 %

Using the thresholds of frequency as approximately deduced in the table of § 34 as standards for comparison, let us now examine the Old English frequencies sound by sound. *þ*, with a frequency of 10.82 per cent, had it remained *in toto* an unshifted *t*, would have been almost 50 per cent above the upper threshold of *t*. The fact that it has crept into the first person plural present of the verbs subsequent to the sound-shift is at least partially offset by the action of Verner's Law, even considerably later than the operation of the sound-shift, which converted not a few occurrences of the new Germanic *þ* into a voiced spirant. With this sound at least there can be no doubt that in early Germanic times it was very near to the upper threshold. If it had not shifted then, it never could have continued as *t* with the unparalleled frequency of 11 per cent.

t, at 4.24 per cent, is colorless. It is too low for a *t*, and yet almost too frequent for a *d*. If this at all represents the early Germanic condition of things, we must say that the Indo-European *d* at 4.24 per cent had approached the upper threshold so closely that it must have been spoken very *lenis*.

d at 3.75 per cent is just right for *d*, and consequently too frequent for *dh* from which it became less conspicuous, were it not that a certain part of these *d*'s arose under the shift described by Verner's Law.

h at 4.1 per cent, had it remained an unshifted *k*, would certainly be at the upper threshold and ready to become less conspicuous. For we must remember that the frequency of this sound was diminished by the operation of well-known sound-shifts (Verner's and Siever's Laws).

But what is more important is the unconcerned fashion in which the Anglo-Saxons even at that early date dropped their *h*'s. Two sound-laws alone in Old English illustrate how many *h*'s were lost before that date of the language at which we are examining it. A medial *h*, when preceded by *r* or *l* and followed by an inflectional vowel, was lost — as nom. *mearh*, gen. *mēares*, "horse." Further, every intervocalic *h* disappears, as O. E. *slēan*, "strike," but Gothic *slahan*; O. E. *ēa*, "water," Gothic *ahwa*; O. E. *sēon*, "see," Gothic *saihan*; and many other exceedingly common words, evidence which seems to imply that 4.1 per cent is a very conservative estimate for Germanic *k*. Hence, it is not overbold to assume, as in the case of *þ*, that it too had crossed the upper threshold and become less conspicuous.

k at 3.49 per cent would be well above the upper threshold had it remained *g*, for which the highest frequency is the modern Swedish 2.5 per cent. Therefore, we may safely say that Indo-European *g* became Germanic *k* because the *g* had crossed the upper threshold.

g at 3.38 per cent is much too frequent for *g*, not to mention *gh*, from which it developed. But here we may conclude nothing, first, because part of these *g*'s may have arisen under Verner's Law, while some of them also represent consonantal *ǵ* written as *g*. Yet that the Germanic *g* was already too frequent in Old English, and hence the Indo-European *gh* too frequent in primitive Germanic, is attested by the tendency of Old English *g* to shift into a spirant, if not totally to disappear: *wægn*, "wagon," became *wæn*, for example. The *g* in *giefan*, "give," Gothic *giban*, scholars are agreed was pronounced a spirant. Similar examples might be multiplied almost indefinitely.

f at 2.03 per cent, even after we allow for the action of Verner's Law, was not frequent enough to justify its weakening. To say that Boethius did not write about *friend*, *foe*, *fish*, *field*, *fee*, *fear*, *fight*, *fright*, and so on, is after all no argument. This fact may be the explanation of its rareness, since these words undoubtedly made up a considerable part of the normal vocabulary of the early German. Yet the moment we begin postulating what the primitive Germans talked about, we are in a quandary.

þ at one tenth of one per cent is indeed well below the lower threshold for *b*, and certainly had no cause to shift. That the figure is more or less correct is attested by the rareness of the Indo-European *b* from

which it shifted. Germanic *p*, like *t*, which was at the lower threshold, must then have had a very *fortis* pronunciation — an important factor when we turn to the Old High German sound-shift.

b at .89 per cent does not seem to have had good cause to change, though it must be borne in mind that I.-Eu. *bh* is written in O. E. not only as *b* but also as *f*, a fact which, instead of helping us, simply further vitiates the significance of the percentage for *f* (from I.-Eu. *p*).

m at 2.87 per cent and *n* at 7.53 per cent offer startling correspondences to the nasals of modern languages, the more significant because to a large extent they are not cognate.

Now of our nine explosives, measured almost a thousand years after the historic sound-shift, *p*, *h*, *k*, and *g* with all certainty, and perhaps *d*, appear to have crossed the upper threshold of frequency and accordingly were weakened. If the reader retorts that they have these high percentages simply because subsequent to the sound-shift many final vowels have dropped, thereby reducing the total number of sounds, I reply likewise that consonants dropped finally, as well as in the reduplicating syllable initially. Perhaps the very falling together of the Indo-European aspects into the Germanic preterite, which included what was originally the reduplicated perfect, together with the new dental preterites, was the ultimate cause of the sudden ascendancy in frequency of the explosives.

But, to return to our main question, why did Indo-European *p*, *d*, *b*, and *bh* shift to Germanic *f*, *t*, *p*, *b*? Were they simply dragged along with the dentals and gutturals, in a general phonetic drift, without really having any right to weaken their form? I believe that they were. When Indo-European *t* and *k* shifted because of their vast frequency, *p*, which was likewise a *tenuis*, followed analogically, since for the conspicuousness which it lost in explosion it could compensate in duration. This then left no large number of *tenuis*. *g* was very frequent and shifted; *d*, which was at the upper threshold, shifted presumably from a *lenis* media to a *fortis* *tenuis*; and *b*, again, by analogy followed suit. Both *gh* and *dh* were either too frequent, or else had so nearly approached the upper threshold, that they shifted, since after all no mediae now stood in their way.

But, the reader may reply, is not the shifting of *b* and *d* to *p* and *t* really a disproof of the theory, since, though they were infrequent,

yet they became less conspicuous? No, this shifting rather proves the thesis, for these were the very sounds which later returned to greater conspicuousness in Old High German and brought about the Old High German sound-shift. It was because such a large part of Grimm's Law was due to the operation of analogy, together with new conditions resulting from the action of Verner's Law, that the various dialects tried to compensate for the unequal balance, and adopting different measures, split farther apart. Let us now concentrate our attention on Old High German.

(41) In respect to the figures above we must assume, if our principle of frequency be correct, that both Germanic *p* and *t*, which were shifted analogically despite their comparative infrequency, would tend in turn to become more conspicuous — other things being equal — after the influence of analogy was exhausted and the new sounds were no longer felt as weakenings of the old. To be sure, other things were not equal in Germanic, and least of all in Old English. The Indo-European tenues that followed spirants remained unshifted, thereby helping to strengthen the new tenues. Old English itself, for example, by weakening of endings, by syncope of vowels, by loss of nasals, and of *h*, *g*, *w* (in certain circumstances), must have so far diminished the number of vowels and other consonants, that the percentages of the tenues rose correspondingly. In this revision the gradual borrowings from Norman French undoubtedly helped. For, say what one will, the tenues of modern English are safely within their thresholds. And similar changes must have taken place in North Germanic. Old High German helped its *b* by hardening the voiced labial spirants.

But in Old High German the endings did not weaken so early or so completely, and the rareness of *t* and *p*, and the excessive frequency of *g* and *d* must have been perceptible. It would not be surprising, then, if *t* and *p* tended to strengthen, *d* and *g* to weaken. How great a change was to be made would depend here, as in pro-ethnic Germanic, partly upon analogy. Perhaps the strengthening of *t* and *p* to affricatae might in some places drag along *k* by analogy, though such a change would not be so thorough and permanent as the others. Perhaps the weakening of *d* and *g* might again influence *b*, especially since it had been made more frequent by the hardening in many places of the voiced labial spirant.

Hence, we may expect to find in German that which we do find — regular shifting of some consonants over huge territories, and great confusion in analogous shifting of other consonants in narrower localities. At this point of the inquiry we are somewhat better placed than in discussing the Germanic sound-shift; for in East Franconian, the dialect of the Tatian translation, one of the sound-shifts characteristic of Old High German (*þ* to *d*) was still in progress. This shift of *þ* to *d* we might well now consider. Since the sound *þ* was taking on voice in all positions and also passing into the media (explosive), we must assume, according to the principle of frequency, that *þ* had lost greatly in frequency and was beginning to approach the upper threshold of *d*.

Taking Eduard Sievers's *Tatian* (Paderborn, 1892), I counted the following: Tatian II (Luke i, 5-25), III (Luke i, 26-56), IV (Luke i, 57-80), V (Luke ii, 1-7), VI (Luke ii, 8-20), VII (Luke ii, 21-39), XII (Luke ii, 40-52), IX (Matt. ii, 13-15), X (Matt. ii, 16, through *thes after ther*). For this count of 10,000 sounds, I treated each affricate and double spirant as single sounds, all other double consonants except *uu* as two sounds. Without interpolating I took the letters in the form in which they occurred in the text, though without such an interpolation it is exceedingly difficult in the case of *h* to say what percentage of *h* goes back to Germanic, and what to Indo-European *k*.

Dentals

t	792	7.92 %
z, zz	175	1.75
th	330	
d	146	
ð	8	
New d	484	4.84

k	63	.63 %
qu	49	.49
	149	1.49
g	352	3.52

Labials

b	145	1.45 %
pp	3	
bb	3	
	6	.06

Gutturals

h	302	3.02 %
hh	18	.18
ch	19	.19

f	172	1.72 %	nn	35	.35 %
ff	3	.03	n (gutt.)	28	.28
v	13	.13	r	569	5.69
ph	9	.09	rr	4	.04
	<hr/> 25	<hr/> .25	s	522	5.22
p	20	.20	ss	9	.09
l	208	2.08	w	210	2.10
ll	29	.29	j	26	.26
m	289	2.89	u	9	.09
mm	4	.04	sch	2	.02
n	1,073	10.73	Total consonants	<hr/> 5,639	<hr/> 56.39 %

Because of the varying and inexact orthography of Tatian, this table is not so helpful as we could wish. But the dentals, none the less, give a definite clue to the nature of things, and may be considered one of the decisive proofs of our theory. The Germanic *þ* in East Franconian had dropped from roughly 10 per cent to 4.84, which is certainly below the lower threshold of frequency. Hence, there was every good reason for its taking on voice and becoming more conspicuous. If 5.02 per cent, which is the percentage of modern Spanish *d*, at all represents the threshold where *d* becomes a voiced spirant, it is not surprising that the Germanic *þ*, at 4.84 per cent, having crossed this threshold, slowly grew more conspicuous until it became *d*. Incidentally, the *þ* in Modern English has become much less frequent, and has in most positions taken on voice. If Godfrey Dewey's percentage of 3.4 per cent for English *th* may be taken roughly to represent American colloquial speech, that fact would account for the occasional, vulgar pronunciation "dese," "dose," "wid," for *these*, *those*, *with*. *t* in East Franconian at 7.92 per cent is another definite proof of our theory. For we must here flatly assume that, if Germanic *d* had not weakened in East Franconian, it would have had this frequency of 7.92 per cent, which is certainly well above the upper threshold of that sound. To be sure, some of these were actual Germanic *t*'s protected by a spirant from shifting earlier to the affricate. But even so they were not so

numerous as to prevent us from saying that the Germanic *d* in Old High German, at such a percentage, had become too frequent.¹

The affricates *z* and *zz*, with only 1.75 per cent, are a further proof. Here *t*, without any question, must have crossed the lower threshold, since in none of the thirteen languages examined do we find anywhere nearly so few *t*'s, even should we add to 1.75 per cent a considerable sum representing the *t* protected by a spirant which accordingly remained unshifted. In this change, moreover, we have a happy parallel in Greek. Greek *θ* at 1.36 per cent later shifted to the affricate *tʰ*, then to *ʃʃ*, and finally to *ʃ* (as in modern Greek), illustrating a similar strengthening of sound under diminishing frequency. So too, incidentally, the other two Greek aspirates shifted in a corresponding fashion and from the same cause.

Why the Franconian dentals became partly so rare, partly so frequent, it is not difficult to discover. First of all, the Germanic *t* being rare, had every reason to shift to the affricate. And that East Franconian had more *d*'s and decidedly less frequent *ʃ*'s than Old English is explicable at once from their differing verbal systems, which go back to two different Indo-European categories.

O. E. strong verbs, with few exceptions, fell together in the stem-accented class of thematic verbs (Sanskrit *tudāti*), and hence show *ʃ* wherever the ending originally contained a *t*. But Old High German adopted the general class of root-accented thematic verbs (Sanskrit *bhāvati*), and consequently, according to Verner's Law, had in similar positions the voiced spirant which, long before the Old High German sound-shift, had hardened to *d*. By this simple difference, which affected the third singular and plural, and the second plural, the most frequently occurring forms, Old High German gained as heavily in *d* as it lost in *ʃ*.

All the labials are uncertain because of the orthography. *b*, with 1.45 per cent, which had been attained by shifting the corresponding voiced spirant to the media, had undoubtedly crept back within the threshold. Perhaps there is some connection of cause and effect here.

¹ The fact that some Germanic *d*'s appear orthographically unshifted in Tatian (for example, *dohter*), only strengthens our contention, since in counting them as *d* instead of *t* we make the Germanic *ʃ* appear seemingly more frequent, the Germanic *d* less frequent, a condition which is exactly contrary to our thesis.

p, despite the confusion of its several orthographic forms, undoubtedly strengthened into its affricate because of rareness, just as we forecasted. *g*, at 3.52 per cent, on the other hand, was well above its upper threshold. At any rate it is not at all surprising that in some High German dialects this over-frequent *g* actually weakened into a *k* (Tatian's *geban*, Bavarian *kepan*).

k and its affricate, despite the uncertain orthography, seem from their percentages to have been too rare. Germanic *k* was near enough at least to the lower threshold to have been in part shifted to the affricate, after the analogy of the excessively rare *t* and *p*.

Reviewing these statements, we may, therefore, say just what we postulated before beginning the actual examination: *t* and *p*, being rare, were shifted in all positions to affricates; *k* followed analogically, at least in part, though not so completely as the other two tenues. The same view is applicable to Bavarian and Alemannic, *mutatis mutandis*. Alemannic, for example, also shifted its *p* and *t*, and *k* followed by analogy. It, further, shifted its *d*; but here *b* and *g*, which were already near the upper threshold, followed by analogy. Where Tatian has *geban*, the other two dialects had *keban* and *kepan*. Though this later change was not so complete as the change of *d* to *t*, yet, even after the new *k* and *p* slowly returned to the voiced mediae in most positions, they must have had the *lenis* pronunciation of a sound near the upper threshold to explain the peculiarities of Notker's *Anlautgesetz*. In this, the new *d*, arising from Germanic *p*, often shared, as the modern word *tausend* (English *thousand*) clearly shows. And, as pointed out above (§ 35), the over-frequency of the mediae caused such a *lenis* pronunciation that in some parts of modern Germany the inhabitants cannot and do not distinguish them from the tenues.

Despite the comparative inexactitude of our measurements of Old English and East Franconian, we cannot fail to see that the many sound-changes which have occurred and are still occurring in the Germanic dialects are not arbitrary and irrational shifts. So often does a change in conspicuousness concur with a change in frequency, that a functional correlation cannot be denied. One might, of course, make counts of all the various High German dialects. But to what end? The results would show only that which we have already induced from the Tatian statistics.

(42) In conclusion, we may examine our present problem both *a priori* and *a posteriori*. The moment one admits *a priori* that, if every word should begin with a *d*, the *d* would weaken, that moment one admits the entire thesis. For, if the *d* should weaken in those circumstances, since it is known, on the other hand, that some words in a language can and do begin with a *d*, it follows that there is at some point a threshold where the *d* will not weaken. If it is said that the *d* would possibly weaken into a *t*, one admits thereby that *t* possesses a higher threshold of frequency than *d*. So also *a priori*, with regard to the lower threshold, one must admit a similar state of affairs. And as we argue of the *d*, so we may argue about every other spoken sound.

A posteriori the case is just as strong. The statistics are approximate only, though not altogether false; they are not perfect; yet they do show one thing which cannot be disputed — a preponderant frequency of the *tenues* over the *mediae* in languages spoken by hundreds of millions of people, yet in languages separated from each other often by thousands of miles and years. To say that this high frequency comes about by chance is a thoughtless assertion. According to the laws of probability, we should expect one sound to be roughly as frequent as another, since language is but a permutation of the same, helped out by conventions of accent and syntax. To say that sounds occur at a random frequency is to say what is contrary to fact. For the constant ratio of *tenues* to *mediae* is nothing less than astounding; none of us has ever dreamed that such a law was the basis of phonetic change. The tendency of given consonants to hover about a mean which remains constant in each language may, therefore, be regarded as one of the striking phenomena of human behavior in language.

To be sure, one may say that there are a few cases in which this ratio is not true. But these few cases are, indeed, very few, and serve to illustrate further the efficacy of our law, since a compensatory weakening is actually taking place in these very instances. What is more natural than to find among ten modern languages a few which are preparing to undergo changes?

The truly regrettable thing is that a principle which is *a priori* so seductive must depend upon somewhat imperfect statistics for demonstration. Nowhere do we have entirely satisfactory conditions. In East Franconian, perhaps the most untrustworthy analysis of all,

not only are we hampered by varying orthography imperfectly transmitted, but the text itself is a translation of a translation. This we must use instead of an accurate phonetic examination of colloquial speech. Surely, the principle of frequency is valid, if by means of it, in face of such difficulties, we can demonstrate anything at all.

The great and undeniable proof of our theory is this — that after leaving the Indo-European parent thousands of years ago, and after having spent those thousands of years in changing and obliterating the old consonants, nine descendants of that language have still kept this ratio of *tenues* to *mediae*, even though by now their *tenues* and *mediae* go back historically to the most various and dissimilar sources. As man, developing culturally and changing in environment, uses one series of concepts more frequently than others, and consequently some words more frequently than the rest, slowly but steadily changing here as elsewhere his old methods of life, still he remains lazy, and even in his speech will not pronounce a single sound more forcibly than is necessary to make his hearer understand him. And nothing so obviates the necessity for clear, careful, and exact pronunciation of a sound as the comparative frequency of that sound; and nothing so compels a clear and careful articulation of a sound as the tendency of that sound to become rare.

B. VOWELS

(43) Vowel-changes fall roughly into two great categories: the independent and the dependent. The dependent changes in turn can be again divided into two categories: the environmental and the accentual. By independent vowel-changes are meant changes in the color or quantity of a vowel, which take place without in any way being influenced by the position of the accent or the character of the surrounding sounds. Every spoken language offers in its history many such examples: Old English *hūs* becoming *house*, Old High German *mīn* becoming *mein*, Old Latin *douco* becoming *dūco*. We might continue these examples indefinitely.

Dependent vowel-changes, on the other hand, are such shifts as are occasioned directly by the position of the accent, or by the character of surrounding sounds. Where a change is due to the influence of neighboring sounds, the change may be called environmental; where due to the position of the accent, accentual. Nasalization, umlaut,

“compensatory” lengthening, are all environmental vowel-changes. Moreover, such a change as early Latin **suesor* to *soror*, where the *u* rounded the following *e* to *o*, belongs to this category. Such dependent changes of vowels, however, as are brought about by conditions of accent, as for example **còn + fácio > *cónfacio > cónficio > confício*, differ enough from the environmental to merit consideration as a separate category.

(44) We need not delay long over a consideration of vowel-shifts dependent upon the position of accent. Any reduction or syncope of a vowel, which is caused directly by the position of the accent, has as its ultimate cause that force which determines the location of its accent. From Part I of this paper we have seen that the position of the accent of a word is directly dependent upon the relative frequency of that word and its component parts in the stream of spoken language. Therefore, the reduction or syncope of any vowel effected by a shift of accent is due directly to the comparative frequency with which the word, its stem, or its various prefixes, formative suffixes, and endings occur in the stream of speech. Examples are: English *master-mister* (cf. page 3); Latin **cónfacio, confício* (cf. § 10); Sanskrit *dvêṣmi, dviṣmās* (§ 4). If the reader accepts the results of Part I, he must perforce accept the present deductions from it.

It may not be amiss to point out here that such a theory as the present is extremely far-reaching in Indo-European philology, for nothing is more characteristic of the Indo-European language than ablaut, which all Indo-European vowels exhibit without exception. If it be true, as no one can seriously doubt, that ablaut was the result of the system of Indo-European accentuation, we have now pushed the investigation of the problem one step further. The phenomenon of ablaut was detected long ago; its extent and its dependence on accent have been thoroughly investigated in recent years. The present thesis strives to make accent, which is the determinant of ablaut, itself a function of relative frequency. If this be true, there then remains for us to deduce from the Indo-European accent the actual frequency of occurrence of various concepts in their relationship to one another in Indo-European times; and hence the relative intensity of the concepts,¹ which, if we are able to determine it, should throw light on the

¹ I hope, in a future paper, to investigate the problem of relative frequency and intensity in concepts.

condition of Indo-European culture and the degree of its civilization shortly before the break-up into dialects. For, if this argument be valid, the character of the pro-ethnic civilization ultimately determined the frequency of use of its concepts, the frequency of use of the concepts determined the actual accent of the words and their component parts, which in turn is finally reflected in the accentual vowel-changes known to us as ablaut.

But the problem of dependent accentual vowel-changes is not so easily despatched. The question still remains why some unaccented vowels are not reduced. An example is the \bar{a} in Latin in the originally unaccented syllable of *exāctus*.¹ Why was not this \bar{a} reduced? Is it ever possible for an \bar{a} to be reduced when unaccented? Of course it is, for unaccented \bar{a} in Indo-European was invariably reduced, becoming \textcircled{a} (*schwa*). There is nothing in the nature of \bar{a} which, when it is unaccented, precludes reduction.

If the Latin \bar{a} had been reduced, would it have developed homonyms that might have led to confusion? Obviously not. If it had become short \check{a} , or *schwa*, either of which would be a logical step, there would still have been no other short \check{a} or *schwa* in an unaccented syllable with which it might have been confused. For there is no proof of the existence of *schwa* in Latin at all after Indo-European *schwa* had become short \check{a} ; and an original short \check{a} in an unaccented syllable in Latin had become *i*, *e*, *u* or had been syncopated. Here then is a definite disproof of the *Trägheitsgesetz* as the sole cause of phonetic change. A short vowel is, by the very nature of things, easier to pronounce than the corresponding long vowel; \bar{a} , as is shown by other languages, is capable of reduction in an unaccented syllable; unaccented \bar{a} might have been shortened in every single instance in Latin without leading to the slightest confusion. If the *Trägheitsgesetz*, as stated, were the sole determinant of phonetic change, there is absolutely no excuse for its having failed to operate here.

There remains, in light of this argument, only one explanation. The sound \bar{a} in Latin, even in the unaccented syllable, must have been so contributory to the inner *Gestalt* of the word and always felt as such

¹ The fact that \bar{a} appears in *exāctus* under special conditions (\check{a} go: \bar{a} ctus) does not affect the question; cf., for example, other long vowels originally unaccented and yet also unreduced, *dēlātus*, *confēci*, *impūrus*, and many more.

a distinguishing feature of each word in which it occurred, that, despite the reduction of other vowels under like conditions, it maintained itself unchanged. If a consonant had so behaved, we should say in light of the results obtained in Part II, that it had been too conspicuous, and that the cause of its conspicuousness was its being near the lower threshold of frequency. So, too, we must argue of a vowel.

For vowels likewise have thresholds. If every word contained no other vowel than *a*, the *a* as such would surely not serve to distinguish one word from another, but would exist merely as a glide between consonants or as an appended element. Only the consonants would be distinguishing marks. From this we can easily establish an upper threshold of frequency below which the vowel begins, with increasing rareness, to become more conspicuous and to constitute a distinguishing feature of every word in which it occurs. So too, conversely, if a vowel appeared but rarely. Let us suppose that a fairly rare word consisted of a single vowel which occurred nowhere else. Here the vowel, which alone constituted the word, would be pronounced very carefully and distinctly, — so distinctly in fact that it would undoubtedly be provided with an on-glide and off-glide to separate it from surrounding sounds, — and would itself be increased in duration until the hearer was sure of its identity. In such a way a short vowel might become long, if not actually diphthongal. From this we see that each vowel has likewise a lower threshold below which it gains in conspicuousness.

With these vowel-thresholds in mind, we can now easily see why *ā*, though unaccented, remained in such Latin words as *exāctus*. If the Indo-European vowels without exception underwent reduction in unaccented syllables, this means that all the vowels, as an entire category, had become so frequent as to cross the upper threshold, and consequently weakened wherever opportunity offered. A similar condition of things was postulated above for the Germanic consonants. In regard to accentual vowel-changes then, we must say that, though the accent of a syllable depends upon its relative frequency, the behavior of the vowel in that syllable, which has lost accent, depends upon the position of that vowel in respect to its own frequency-thresholds.

(45) Turning now to environmental sound-changes which are similar to the preceding in their dependence upon conditions in the remainder

of the word, we are at once faced by a similar problem. We are told that the *u* of **suesor* rounded the following *e* in Early Latin to *soror*. This is undoubtedly true. Similarly, Germanic **kyēman* became Old Norse *koma*, Early Old High German (Hl.) *wēla* became later *wola*. Yet that such a rounding is not universal, automatic, and invariable when *u* precedes *e* is shown by modern English *sweat*, which fulfils the same conditions as **suesor* without undergoing the same changes. Since similar things under similar conditions should remain similar, there can be no complete explanation of any sound-change, which does not consider and explain all instances in which, under similar conditions, the results are different. Let us approach the problem by an examination of more obvious changes.

A simple example of environmental vowel-change is the historic French nasalization already treated in § 38. There the change from simple to nasalized vowel was due to the following nasal, which, because of its excessive frequency, had weakened so far as to disappear, imparting its color to the preceding vowel. The phenomenon of "compensatory" lengthening is similar. The disappearing sound imparts, not its color, but its time or duration, to the neighboring vowel. The "compensated" sound disappears, presumably because of excessive frequency. Hence, we may say that some environmental vowel-changes are due to the weakening of a neighboring sound; that this weakening results from excessive frequency; and that the sound-change is in reality an assimilation of some attribute of the vanishing sound to the vowel.

But in **suesor* > *soror* it is the vowel that is really assimilated to the labial, as is clearly shown by Old Latin *duenos* > *duonos* > *bonos*, where the labial quality, far from being lost, is preserved to this day. Similar to this are all cases of umlaut in which the assimilation takes place at a distance, despite intervening and stable sounds, as proto-Germanic **mati*, **dōmian*, **dohtri* becoming Old English *mete*, *dāēman*, *dæhter*. The reason for this change is undoubtedly the anticipation of the position of the following *i* during the pronunciation of the preceding vowel — in other words, assimilation. But that such an anticipation is not invariable in human speech is illustrated by Modern English *hotly*, *fondly*, *moody*, German *Honig*, *sonnig*, where with apparently similar conditions there is no tendency toward umlaut.

Here again we must view the assimilation as a weakening of the assimilated sound, and its weakening as resulting from excessive frequency. Any environmental sound-change in which the vowel is assimilated to another sound in the word is an example of this. Cases of vowel-contraction are corollary to the above, since the fusion is nothing but assimilation. That vowel which renounces its color for the sake of the other must be less intense, even if the color of the assimilated vowel by nature is less conspicuous than its neighbor's, unless the assimilated vowel is likewise at its upper threshold of frequency. Too many languages maintain successive vowels without contraction for us to assume that vowel-contraction depends on nothing but vowel-contiguity. In short, before any assimilation can take place, the assimilated element must first be weak, the assimilating element intense; and the weakness or intensity of a vowel, as of any other sound, depends solely upon its relative frequency in the stream of spoken language.

(46) Turning to the independent vowel-changes which take place *per se* regardless of their environment, we find not only a disproof of the *Trägheitsgesetz* as the sole determinant of vowel-change, — since here again vowels frequently become more conspicuous to the ear and more difficult to pronounce, — but likewise a disproof of any other theory, either of climatic influence or of organic changes in the mouth. If, to be concrete, gales in England, or a possible recession of the English jaw-bone shifted Anglo-Saxon *ī* to *ai*, and *ō* to *ū*, as in O. E. *rīdan* into *ride* (*raɪd*) and *sōð* to *sooth* (*sūp*), because of their incompatibility with the new order of things, why then, after having in large measure successfully rid the language of *ī* and *ō*, did speakers of English in turn select these very tabooed sounds as the goal for new shifts? Why did O. E. *rāp* become *rope* (*roʰp*), and *etan* become *eat* (*it*), if mouths or climate or temperamentality of babyhood, or linguistic substrata, or *Sprachmischung* had only a few generations before seen fit to delete *ō* and *ī* from the language? Perhaps here again the cause of change in a language lies in the language itself.

We have seen in the preceding paragraph that vowels, like consonants, must have thresholds. To be sure, we cannot demonstrate this fact, as in the case of consonants, first, because no exact investigation of the frequency of vowels in any spoken dialect has ever been made, and second, because vowels vary so greatly from dialect to dialect,

as a result of the constant flux of language, that even if we did have percentages for all dialects, the dissimilarity of the vowels would prevent comparison. Consonants vary less and are more stable. Or again, we may say that a long vowel is more conspicuous than its corresponding short vowel; and indeed by glancing at the vowels given in the tables in Part II (for example, for Sanskrit), we find that the long vowels tend to be accordingly less frequent. The diphthongs, which are even more conspicuous, are even less frequent. This is a partial proof of the existence of thresholds among vowels of the same color. Though not in detail demonstrable, the case must be that vowels of the same quantity but different color differ among themselves in point of conspicuousness; for example, *e* from *o* and *u*. And for each vowel that is felt as a distinct sound, there must be an upper and a lower threshold of frequency, whose absolute percentages, however, will depend upon the total number of sounds at the disposal of the language.

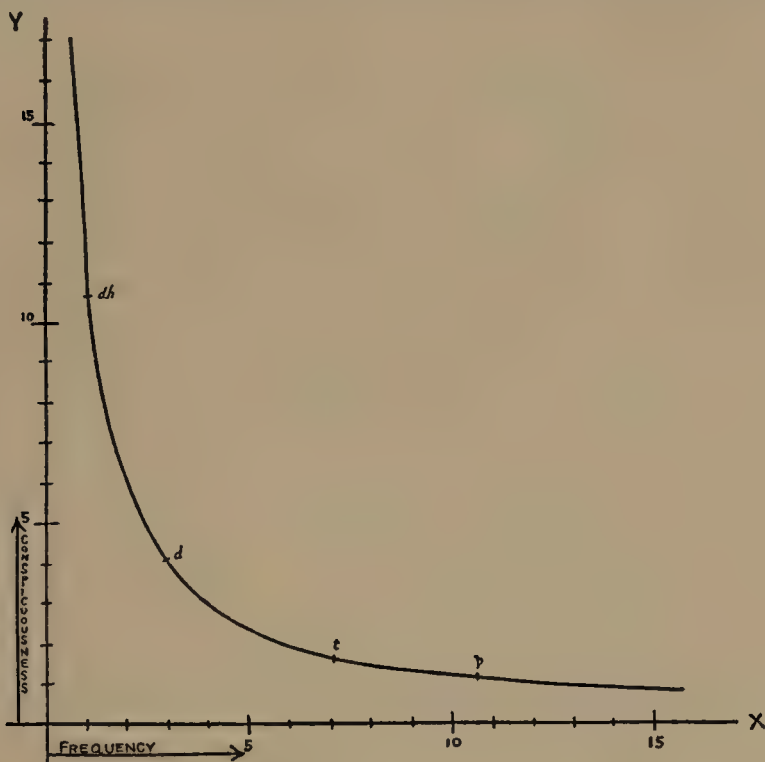
Now, if any vowel crosses its lower threshold, it should become more intense, and surrounding sounds might well be assimilated to it. But in *rīdan* > *ride* (*raīd*) no assimilation can take place; and in dozens of other words the *ī*, if it must become more conspicuous, will have to add an increment of conspicuousness to itself without any consideration for the nature of surrounding sounds. Correspondingly, if a vowel should cross the upper threshold of frequency, it would lose conspicuousness and weaken. In such cases where it can be assimilated to other sounds, it will no doubt undergo that assimilation. But in the many instances where, by the nature of things, no assimilation is possible, the vowel will become less conspicuous by sacrificing some of its color or duration. This, I hold, is the cause of the independent vowel-change. O. E. *ū*, having become too rare, strengthened to *au*; Latin *ou*, having become too frequent, weakened into *ū*. Since vowels can shift by easy and imperceptible stages, changing greatly in conspicuousness by slight changes in color, intensity, or duration, it is not surprising that they are especially sensitive to any shift in frequency of use.

(47) Observing the speech of many hundreds of millions of people, we have demonstrated, in part actually, in part by induction, that the conspicuousness or intensity of any element of language is

inversely proportionate to its frequency. Using X for frequency, and Y for conspicuousness we can express our thesis thus:

$$Y = \frac{n}{X} \text{ or } XY = n,$$

where n is some constant, the actual size or value of which need not be our immediate concern now. Let us for the sake of clarity plot the curve of this formula, which is a hyperbola, using the X-axis for fre-



quency, the Y-axis for conspicuousness, and taking a convenient number for n . Let us, further, place upon the curve some of the dentals as they approximately occur in a few of the several languages examined. Even though this curve of dentals does not actually exist in any language, the interrelationship will be interesting.

In the light of this curve the process is quite clear. As any given sound becomes more frequent, it tends to pass down the curve of the hyperbola, and *vice versa*; *dh* is in conspicuousness what *p* is in frequency.

The number of consonants in a language is limited by the powerful Weber-Fechner Law,¹ which states that actual differences in intensity must surpass a certain relative proportion before the difference is perceptible to the mind. This law prevents the number of sounds from becoming too great, and accounts for the fact that a *tenuis* is not only more frequent than its corresponding *media*, which we expected to find *a priori*, but that the actual frequency varies but little from language to language. Hence, we may explain sound-changes, the mention of which I have reserved until now, and also gain light on the explanation offered above of the cause of the Germanic changes under Grimm's Law. For the sake of clarity I shall approach my argument by a consideration of the vowels.

A short *o*, in shifting to *ö* (*i*-umlaut), becomes a sound quite distinct from a short *e*. We perceive the difference at once. But let us suppose that for some reason the new *ö* becomes more frequent in the language, and consequently, according to the Principle of Frequency, loses some of its conspicuousness. If this waning of conspicuousness continues, there will at last come a time when the difference between *ö* and *e* (or some other vowel), though still physically actual and phonetically recordable, will cease to be perceptible. The *ö* and *e* will still differ physically, yet to both hearer and speaker this difference will be subliminal. It is not surprising, then, that the coming generation, perceiving no difference, and having little concern for etymology, will make no difference in pronunciation. Hence *ö* and *e* will fall together also on the recording apparatus.

The results of this collapse will be twofold. First, the *e*, which now includes the old *ö*, will instantly become too frequent to justify a continuation of its previous intensity. Therefore, it must weaken, either by shifting to a new and less conspicuous sound (that is, we shall have independent vowel-change), or must be assimilated to neighboring sounds (that is, a dependent, environmental vowel-change). In the latter case it is possible for two or more sounds to fall together into one, only to separate (that is, *Brechung*) again into two or more — not to restore the original condition, but to establish a new condition. The

¹ For a careful, illuminating, and complete discussion of the Weber-Fechner Law, see Edward Bradford Titchener: *Experimental Psychology* (New York: Macmillan, 1905) II¹, 25 ff., §§ 13, 14.

sounds fell together because their differences were subliminal; the new sound "breaks" because of the excessive, new frequency. Germanic *i* and *e* fell together in Gothic because *e*, or *i*, or both had become so weakened by their frequency that the difference in conspicuousness was no longer perceptible. This new *i* in turn broke back to *e* before *r*, *h*, *hw* because it was so weak in the neighborhood of these sounds as to be assimilated to them. As it happened, this assimilation resulted in *e* (*ai*); as it happened, it restored some of the old *e*'s; but only by chance, and not as a restoration. For we know that the *e* in Gothic *wair*, Old English *wer*, was originally an *i*, as in Latin *uir*. After the assimilation had gone so far as to reduce the frequency of *i* to such a point that it again corresponded to its intensity, the assimilation of the weak *i* to surrounding sounds ceased, and the new *e* took on a new intensity befitting its frequency. The phenomenon is so frequent in linguistics, and its explanation, in light of the present Principle of Frequency, so patent, that it deserves at this time no further illustration.

But as with vowels, so too with consonants. Consonants may be so weakened that their differences are no longer perceptible. Then they will fall together just as the vowels. Obviously, the less conspicuous consonants undergo such changes more readily, but the more conspicuous are not excluded. For example, the dental spirant and the labial spirant, *f* and *þ*, may each become so inconspicuous that their actual difference ceases to be liminal. Hence, perceiving no difference, the speaker makes no difference, and a *þ* may become *f*, or an *f* become *þ*. To be sure, this falling together will first take place in sound-combinations which favor the assimilatory change.¹ Thus a dental may become a labial, or a labial a guttural.

This explanation answers a possible objection to my exposition of the sound-changes under Grimm's Law. The reader perhaps stopped at

¹ Though the influence of sound-groups on the conspicuousness of a component sound is exceedingly important, and had to be considered to some extent in my treatment of the vowels, yet a full treatment of this phase of the Principle of Frequency demands more space than is at my present disposal. However, I feel that the reader will see that the action of the consonantal or sound-group does not vitiate the Principle of Frequency; for it is clear that any weakening or strengthening necessitated by frequency will first take place in groups which especially favor the change.

that time to pronounce β , χ , f , t , k , and p , and was at a loss to perceive a difference in conspicuousness, forgetting that conspicuousness may also be a matter of duration. That the pro-ethnic Germanic spirants were weaker than the spirants in modern Germanic languages is proved by Germanic β , as is in Gothic *þliugan*, appearing in Old English as *f* in *flēon*; and Germanic f , as in German *Neffe*, appearing as *ch* in Dutch *nicht*. These changes are explicable only in the light of the Weber-Fechner Law, and the Weber-Fechner Law means excessively low conspicuousness in this instance rather than excessively high. For it is almost impossible to pronounce the β and f in normal speech with such gigantic intensity when followed by l as to make their distinction imperceptible.¹

This statement holds not only for vowels and consonants, but also for liquids and nasals. From the point of view of acoustics, r and l must have a certain intensity before their difference is perceptible. The reader, by pronouncing weakly to another person two nonsense-words containing r and l , can demonstrate this fact to himself. For it has always been clear to phoneticists that a certain relative intensity of articulation in speech is necessary to distinctness — a word may be pronounced neither too softly, nor too rapidly, nor too loudly, without leading to obfuscation. Changes within these thresholds are due to relative frequency.

Hence it is possible that the $r:l$ variations in Indo-European and Indo-Iranian, whether one considers them as a falling together or as

¹ In reading our statistics of Old English *Boethius* (§ 40), we were obliged to assume the working of analogy to account for the weakening under such comparatively low frequency of β to f , saying that, though it changed to a spirant, its increased duration compensated for its unwarranted loss of the increment of explosion. As shown by the Old High German of *Tatian*, analogy can be a factor in a sound-change. But Gothic *þliugan* opposed to O. E. *flēon* directly proves that f was so weak that, in certain combinations which favored a dental, its difference of conspicuousness either in point of duration or in position of articulation was subliminal. But from our statistics we know that β , which had vastly overstepped the upper threshold of l , was but a faint spirant, hence f must also have been a faint spirant. The statistics, therefore, contradict the facts. In this case, we must say either that the Principle of Frequency is entirely wrong, which with increasing evidence in its favor is very difficult, or that the language of O. E. *Boethius* does not entirely reflect the language of Primitive Germanic 1,000 years before. The reader can take his choice.

a "breaking" apart, may ultimately be caused by this, namely, that their differences in conspicuousness had become subliminal, the result of excessive frequency. The current explanation that *r* and *l* are so similar in place and manner of articulation as to be difficult of distinction is but begging the question, since we distinguish very carefully between *lap* and *rap*. Philologists must be constantly aware of what phoneticists are constantly emphasizing: a given sound has not only a given place and manner of articulation, but also a lower threshold of intensity. Though some positions of articulation will be more conspicuous than others, because of the motor aspect of phonetics (the labial position being more difficult to pronounce than the dental, and so on), and though we have constantly pointed out that conspicuousness is both phonetic and acoustic, yet we must also remember, in light of O. E. *flēon*, that a sufficient decrease in acoustic conspicuousness may at last make the difference in phonetic conspicuousness subliminal.

The reason that a change in conspicuousness is generally a change in manner is solely that the changes in frequency which occasion it are at a subliminal speed (that is, imperceptible at any time), and hence the changes in conspicuousness must be subliminal. Now the changes in manner of articulation can be, as they generally are, subliminal. But a sound must first be very weak before it can shift in position of articulation without that shift being perceptible.

In other words, a speaker is never conscious of the sound-changes which his words are undergoing; if he were conscious of them, he would check them, as he indeed often does whenever, rightly or wrongly etymologizing, he perceives that changes have taken place which make his language appear inconsistent to him. But this is only after a change has advanced already so far that he can make comparisons. Frequency demands that a change must happen; the nature of man demands that the change must happen imperceptibly. Hence, a phonetic change must take place in that component element of the conspicuousness of a sound, which, according to the Weber-Fechner Law, is capable of a subliminal change; and what element is capable of subliminal change depends upon the conspicuousness of the sound about to be altered.

Therefore, the need of language for many different sounds, that their permutations may be of sufficient number to express the wealth of concepts in the language, is checked by the Weber-Fechner Law, which says that the time will come, in increasing the number of sounds, as arranged hyperbolically according to frequency and conspicuousness, when the sounds will differ among themselves only subliminally and fall together. It is because our sounds are not unlimited and our concepts vast, that we must also depend upon the help of accent, pitch, and order (syntax).

For this reason the hyperbolic relationship expressed in two dimensions is far from accurate, for we cannot place the labials on the graph of the dentals, since only under highly special conditions does *b* become *d* ($b > p > f > \beta > \partial > d$). And even by swinging the hyperbola around in space on one of its axes and trying to plot the hyperbolas of dentals, linguals, palatals, gutturals, labials, nasals, vowels, and the rest on converging planes, we do not escape the difficulty. For, wherever we put the planes, some historical sound-change will demand a different position. The cause of this is clear: conspicuousness alone is at least three-dimensional, and we still have to plot the speed of pulsation of each sound, in other words its frequency, in the stream of speech.

Even after we so qualify our formula $XY = n$, there are those who, if they ever read these lines, will be astonished at the casual manner with which I designate *n* a constant. For it will seem to them that *n*, which determines the position of the hyperbola on the graph, is a far greater and more significant function than XY . For *n* must designate something in actuality. It is very likely the coefficient of *Sprachtempo*, of which we are all conscious, but which has eluded our detection because it appears in terms of a function. For, though sounds stand in this hyperbolic relationship, and though this hyperbolic relationship alone accounts for phonetic change, yet we must not forget that the Weber-Fechner Law acts logarithmically. If, instead of solving our equation for *Y* (conspicuousness), we might fill in *X* and *Y* with their actual values and solve the equation for *n*, we should undoubtedly find in *n* a number varying infinitesimally from person to person, slightly from dialect to dialect, distinctly from culture to cul-

ture, and vastly between the languages of primitive and civilized man. In fact, I believe that an understanding of *n* will ultimately lead to an understanding of that stuff called Life. Unfortunately, life is observable only in its expression; hence the great responsibility of philologists, who are working in that one field of expression which will perhaps lend itself to measurement more readily than any other.

SEVEN QUESTIONS ON ARISTOTELIAN DEFINITIONS OF TRAGEDY AND COMEDY

By A. PHILIP McMAHON

- I. What definitions did the Greeks find most satisfactory to express their ideas of tragedy and comedy?
- II. What definitions did the Romans find sufficient to express their ideas of comedy and tragedy?
- III. What definitions did the Middle Ages, in general, accept as expressing proper ideas of tragedy and comedy?
- IV. What definitions did Dante, in particular, accept as conveying proper ideas of comedy and tragedy?
- V. What definitions did Chaucer, in particular, accept as conveying proper ideas of tragedy and comedy?
- VI. What definitions of tragedy and comedy dominated the ideas of Continental Europe during and after the Renaissance?
- VII. What definitions of tragedy and comedy dominated the ideas of England during and after the Elizabethan Age?

THE very words *tragedy* and *comedy* indicate an origin in the classical drama. Examples of drama, as well as other literary forms, related to that precedent have also been called tragedy or comedy, so that as dramatic and literary species with innumerable historical instances, the words have a definite meaning. In addition, ever since Aristotle, there has been an inquiry into the norm or type abstracted from such instances, in an effort to achieve through definitions a standard for creation and criticism; a struggle to reach an articulate conception, with which dramatic and literary productions could be compared. Finally, there has been an investigation into the problem of what makes tragedy tragic and comedy comic, a search for the values or essences which constitute the tragic and the comic whether in drama, literature, and the other arts, or in the course of experience itself as directly observed. Thus it has been common practice to refer metaphorically to disastrous events as tragedies and to ridiculous ones as comedies.

A good deal of confusion and trouble has been due to condemning the ideas of the Middle Ages with regard to tragedy and comedy, because the formulas of that period were not derived from a first-hand study of the classical Greek drama. As a matter of fact, the Middle Ages relied on broad definitions which were authentically and legitimately Aristotelian, although they knew neither Greek drama nor Aristotle's *Poetics*. But, on the other hand, especially since the beginning of the nineteenth century, ideas of what is tragic and comic alien to Aristotle's own philosophy have been used both to determine the dramatic species and to interpret the text of the *Poetics*.

Bearing in mind that the meanings of tragedy or comedy are related and often interchangeable ideas, we may attempt to trace the persistence of Aristotelian definitions of tragedy and comedy. To cover thoroughly the fields suggested here would require volumes; especially in the treatment of the later questions, what is presented must be thought of as indicating a continuity rather than a complete survey. It need hardly be said that I do not insist on the chronological, linguistic, and national classifications here adopted.¹ If any reader wishes to employ the material in some different scheme, let him suit his convenience as I have mine.²

I

What definitions did the Greeks find most satisfactory to express their ideas of tragedy and comedy?

An attempt will here be made to indicate generally the most probable answers to the seven questions regarding Aristotelian definitions of tragedy and comedy which are asked at the beginning of this article. It is obviously impossible to list all the occurrences of the words or passages in which the idea is referred to, and inquire into their meaning

¹ In what follows I have not attempted to reform the spelling and punctuation of the sources, but have left them as I found them. This note must be considered a substitute for the insertion of the word "sic" several hundred times in the quotations.

² The conclusions of this article are substantially those of my Harvard dissertation in 1916, but it incorporates new material and is condensed in form. For suggestions and advice my indebtedness to Professors E. K. Rand and C. N. Jackson continues and increases.

based on context and historical position. But enough important citations can be produced to suggest that the ideas and definitions of tragedy and comedy, ultimately derived from Aristotle's dialogue *On Poets*, have ever since dominated European thought and language. They have indeed become commonplaces. Accordingly, the broad answer to the seven questions asked at the beginning of this article is: *Definitions ultimately derived from Aristotle's dialogue On Poets.*¹ These questions will be treated separately in the order given and the relation of the answers to Aristotle indicated.

We might, I believe, go even further and ask two additional questions in the light of the evidence here put forward in satisfying those seven questions. We might ask, first: Are the prevailing modern definitions of tragedy and comedy Aristotelian? And second: Is the modern interpretation of Aristotle's definition of tragedy in the *Poetics* Aristotelian? The weight of the testimony would compel us to reply to both questions in the negative. But that is a separate matter and must await a later opportunity for discussion.

In an article published in Volume XXVIII of the present *Studies* (1917), I undertook to examine the conclusion, accepted by scholarly opinion since the Renaissance, that Aristotle's treatise known as the *Poetics* originally consisted of two books, of which one containing a discussion of comedy is now lost.² It seems to me that sufficient proof

¹ The effort to discover traces of the *Poetics* in subsequent references of classical literature to tragedy and comedy has been seriously pursued in but a few instances. Numerous modern scholars have shown the general Peripatetic origin of both the *Poetics* and the standard classical definitions of the dramatic species, whose historical origin I have attributed in my previous article in the *Harvard Studies* (vol. XXVIII), to the dialogue *On Poets*. But to show the direct influence of the *Poetics* generally throughout antiquity requires a theory constructed in advance to include the statements whose relation should be the result rather than the postulate of the discussion. Cf. A. Rostagni, "Aristotele e l'Aristotelismo nella Storia dell' Estetica Antica," *Studi Italiani di Filologia Classica*, N. S., II (1922), pp. 1-147, *passim*, but particularly pp. 104-105. The "patrimonio quasi anonimo dell' universale cultura" which, he claims, derived from the *Poetics*, cannot be proved on the basis of evidence independent of such an *a priori* postulate, but its paternity, as indicated in my previous article, may be found in Aristotle's dialogue, and its progeny is but briefly indicated in the present contribution.

² The thought that the present text of the *Poetics* is only the first part of the original is first strongly emphasized through the title of Vettori's edition: *Commen-*

or reasonable grounds for such a theory can not be found; but for the details of that investigation I refer the reader to the article itself. Since that time no writer has demonstrated that there ever was a second book of the *Poetics*.

The result of my earlier investigation, which I must re-affirm because of misrepresentation,¹ was a negative one with regard to the previous existence of a second book of the *Poetics*, containing a theory of comedy, and a positive one with regard to the dialogue *On Poets* as the most probable eventual source of subsequent definitions of tragedy and comedy.

The explanations of the grammarians Euanthius, Diomedes, and Donatus, give clear statements of what tragedy and comedy are. Their source is stated to be Theophrastus, and in all probability they were ultimately derived by Aristotle's successor from the dialogue *On Poets*. They are objective, almost empirical summaries of the charac-

tarii in Primum Librum Aristotelis de Arte Poetarum. Positis ante Singulas Declarationes Graecis Vocibus Auctoris: Iisdem ad Verbum Latine Expressis. Florence, 1560. (His translation, however, appeared before this, perhaps in 1552.) Vettori himself supposed that the *Poetics* had consisted of three books originally, on the basis of Plutarch, Diogenes Laërtius, and Aristotle's promise about *κάθαρσις*. It is hard to understand why critics should not claim three books instead of two, if they are bent on enlarging the sphere of speculation as to the contents of the *Poetics*. Cf. *Petrus Victorius Lectori* (in edition of 1573, signature b, folio i. recto). "Sed ut ad opus Aristotelem, artemque hanc redeam, iacuit diu ipsa; & paene vndique; tenebris oppressa atque extincta fuit. quippe cum e tribus libris, primus tantum in vita relictus sit: reliqui autem duo qui consequebantur, interierint: nec vestigium eorum vllum restiterit." [Cites Plutarch, life of Homer; Laërtius, life of Socrates; Aristotle, promise about *katharsis*.] "quarum rerum vix umbra quaedam nunc reperitur in hoc libro, quem in manibus habemus. praeterquam quod nullo modo verisimile est ipsum, accuratum in primis doctorem, multas partes huius operis neglecturum fuisse. & eas quidem non paruas: imperfectumque demum id, atque inchoatum reliquisse."

¹ A Rostagni, *op. cit.*, p. 1, n. 1, says, "Affatto insignificante è il recente studio di A. Ph. McMahon . . . il quale, sostenendo la tesi di un unico libro, attribuisce al dialogo *Περὶ ποιητῶν* tutto ciò che si cita come appartenente al perduto libro." Four years later, however, Rostagni published his article, "Dialogo Aristotelico *περὶ ποιητῶν*" (*Rivista di Filologia Classica*, LIV, N.S., IV (1926), pp. 433-470, and N. S., V (1927), pp. 145 ff.) Since my article did not make the comprehensive claim which he asserts it did, as he might easily have seen by reading it, and since he himself years later decided to write about the dialogue, it is difficult to see why that article was *affatto insignificante*.

teristics of tragedies and comedies known to the ancients, and they do not offer evidence of any knowledge of or immediate dependence on the *Poetics*. The definitions and distinctions of the latter treatise differ from those of the grammarians, chiefly in two respects: first, in the technical points introduced into what is primarily a philosophic and scientific analysis intended mainly for playwrights; second, in the famous katharsis clause. On the other hand, the grammarians' distinctions do not differ fundamentally from the basic conceptions of the *Poetics*, since they are also products of the Peripatetic position, unless the katharsis clause is interpreted from a nineteenth-century point of view.¹ As the grammarians' presentation is more inclusive historically, it can thus cover developments of comedy which were not familiar to Aristotle, and it is suited to the purpose of a public wider than students of philosophy and playwrights.²

Although these passages will be cited again in their chronological sequence, it is advisable to quote at this point the words of Euanthius, Diomedes, and Donatus. These quotations should be very carefully considered at this point, for the content of their statements. The words ascribed to Theophrastus and the expressions which parallel them in form are not only authentic, but, as I indicated in my previous article, probably derived by Theophrastus from Aristotle's dialogue *On Poets*. The grammarians had no intention of aiming at originality, and they are not the sources of the formulas which they had from Theophrastus by means of intervening scholars. The grammarians' observations embody formulas which, as the following pages will show, were almost

¹ Wilamowitz, while admitting Bernays's interpretation, declared it useless for a critical understanding of tragedy. Cf. *Euripides Herakles*, I (Berlin, 1889), p. 109: "dieses Kleinod der aristotelischen lehre können wir nicht brauchen, mag es auch das unschätzbarste sein. man kann doch darüber keine worte verlieren, dass eine kathartische wirkung weder Aischylos erstrebt noch die Athener erwartet haben. mag der Philosoph auch noch so scharf und fein die wirkung beobachtet haben, welche eine tragödie auf das publikum oder auch auf ihn bei einsamem lesen ausübte: diese wirkung war den dichtern und ihrem volke unbewusst."

² Cf. A. E. Taylor, *Aristotle* (rev. ed., London and Edinburgh, 1919), pp. 123-124: "No book has had a more curious fate than the little manual for intending composers of tragedies which is all that remains of Aristotle's lectures on poetry. . . . But it may be worth while to remark that the worth of Aristotle's account of tragedy as art-criticism has probably been overrated."

universally accepted until the last century. They are important at this stage because they are the clearest and most extensive expression of those formulas. Viewed in the perspective provided by other Greek and Roman writers, what they report takes a logical place as testimony to a continuous tradition extending from Aristotle down to recent times. Diomedes states:

Tragoedia est heroicae fortunae in adversis comprehensio. a Theophrasto ita definita est, τραγωδία ἐστὶν ἡρωϊκῆς τύχης περίστασις . . . Comoedia est privatae civilisque fortunae sine periculo vitae comprehensio, apud Graecos ita definita, κωμωδία ἐστὶν ἰδιωτικῶν πραγμάτων ἀκίνδυνος περιοχή . . . in ea viculorum, id est humilium domuum, fortunae comprehendantur, non ut in tragoedia publicarum regiarumque. . . . comoedia a tragoedia differt, quod in tragoedia introducuntur heroes duces reges, in comoedia humiles atque privatae personae; in illa luctus exilia caedes, in hac amores, virginum raptus: deinde quod in illa frequenter et paene semper laetis rebus exitus tristes et liberorum fortunarumque in peius adgnitio. quare varia definitione discretae sunt. altera enim ἀκίνδυνος περιοχή, altera τύχης περίστασις dicta est. (Cf. below, p. 129, note 3, and page 130, note 1.)

On the differences between the two dramatic species, Euanthius tells us, that:

inter tragoediam autem et comoediam cum multa tum imprimis hoc distat, quod in comoedia mediocres fortunae hominum, parvi impetus periculorum laetique sunt exitus actionum, at in tragoedia omnia contra, ingentes personae, magni timores, exitus funesti habentur; et illic prima turbulenta, tranquilla ultima, in tragoedia contrario ordine res aguntur; tum quod in tragoedia fugienda uita, in comoedia capessenda exprimitur; postremo quod omnis comoedia de fictis est argumentis, tragoedia saepe de historia fide petitur. (Cf. below, p. 128, note 6.)

The definitions of Donatus are strikingly similar and respecting comedy, he informs us:

Comoedia est fabula diuersa instituta continens affectuum ciuiliū ac priuatorum, quibus discitur quid sit in uita utile, quid contra euitandum. hanc Graeci sic definiuerunt: κωμωδία ἐστὶν (ἰδιωτικῶν) πραγμάτων περιοχὴ ἀκίνδυνος. comoediam esse Cicero ait imitationem uitae, speculum consuetudinis, imaginem ueritatis. comoediae autem a more antiquo dictae . . . ἀπὸ τῆς κώμης, hoc est ab actu uitae hominum quia in uicis habitant ob mediocritatem fortunarum, non in aulis regiis, ut sunt personae tragicae. comoedia autem, quia poema sub imitatione uitae atque morum similitudine

compositum est, in gestu et pronuntiatione consistit. . . . aitque esse comoediam cotidianaе uitae speculum, nec inuria; nam ut intenti speculo ueritatis liniamenta facile per imaginem colligimus; ita lectione comoediae imitationem uitae consuetudinisque non agerrime animaduertimus. (Cf. below, p. 126, note 5.)

These are, to be sure, late and derivative statements, but they testify definitely to the uniform conception from which there are no marked divergences in antiquity.

Spingarn refers to this conception as belonging to "the post-classic period"¹ and also condemns it as "un-Aristotelian."² But it goes back to the classical period itself. It may appear to be un-Aristotelian to those whose minds are saturated with the transcendental German interpretation of the *Poetics*. But antiquity seems to have been largely indifferent to the *Poetics* and certainly it did not participate in the point of view which lies behind the modern interpretation of the *κἀθαρσις* clause. The conception reported by the grammarians can be considered un-Aristotelian if, in contrast to the *Poetics*, it is not primarily philosophical and technical, does not reproduce the very language of the *Poetics*, and is easily understood. But such grounds are insufficient to brand their conception as un-Aristotelian.

The clauses of the standard definitions presented in the statements of Diomedes, Euanthius, and Donatus are paralleled or implied in the *Poetics*, which may be thought of as the later and professional analysis of the drama known to Aristotle, but founded on the same point of view and accepting the same popular grounds of distinction. It was, however, the clarity and simplicity of the definitions from the dialogue *On Poets* rather than the obscure and complex reasoning of the treatise which we call the *Poetics*, that enjoyed great diffusion and popularity.

As Spingarn observed, tragedy and comedy were distinguished by the three grammarians quoted above, and by antiquity in general on one or all of six grounds: (1) characters represented; (2) type of action imitated; (3) contrast between the beginning and ending of the plot; (4) style and diction; (5) source of themes; (6) favorite topics.³

¹ J. E. Spingarn, *History of Literary Criticism in the Renaissance* (3d ed., New York, 1912), p. 66.

² *Ibid.*, p. 67.

³ Spingarn, *op. cit.*, pp. 66-67.

Of these, the first three are the principal ones and the rest are their necessary consequences. In addition to the grounds mentioned by Spingarn, there are two others which are mentioned by the authors to be quoted later: (7) the emotional effect; and (8) the moral purpose. Of these two, the former is mentioned only occasionally, but the latter is frequent from the start. The phrases of Theophrastus cover the first three or principal distinctions. The tears or laughter as showing the emotional results are not often stressed, but the moral aspect is so repeatedly emphasized that this more popular parallel to the technical phraseology of the *Poetics* offered in the grammarians' formulas, derived from *On Poets*, would tend to show that the katharsis clause was also moral in purpose, and not restricted to emotional experience as the principal object of drama.

In the passages from the three grammarians cited above, apart from the direct quotation of Theophrastus, elements (1), (2), (3), (5), (6), and (8), are to be found. But (1), (2), and (3), the essentials, are contained in the words of Theophrastus; the additional distinctions are either natural implications of the three fundamental points, or are due to the contrasts brought out between the two species.

The elements noted by Spingarn and other scholars as making up definitions or conceptions of tragedy and comedy in antiquity and the Middle Ages recur so constantly that we can establish a common consent regarding the topic down to the last century. The explanation for this almost monotonous similarity is a common eventual origin in the dialogue *On Poets*, clearly not in the *Poetics*. So varied are the contexts and influences affecting the writers to be quoted that their agreement is most significant. To show this substantial agreement from antiquity down to the nineteenth century is the purpose of examining the words of so many different authors and reflecting on what they have written.

PLATO

In Plato there were numerous references to tragedy and comedy which illustrate his understanding of their nature. For example, in the *Philebus*,¹ speaking of mental states in which pain and pleasure are mixed, he contrasts tragedy and comedy as the two chief species of

¹ *Philebus*, 48 A.

drama. In the *Republic* ¹ he discusses the harm done to the good by sympathizing with the sorrowful in tragedy and tolerating the ridiculous and unseemly in comedy. Even the best of us delight in those passages of Homer or in those tragedies that stir our feelings most. In the *Laws* ² older children are to be advocates of comedy, but educated people in general will favor tragedy. In another passage of the *Laws* ³ principles for the regulation and censorship of tragedy and comedy are given. These passages, as far as they indicate Plato's conception of the characteristics of tragedy and comedy, do not conflict with Aristotle and the other writers of Greek antiquity, although they differ with regard to value and philosophical justification.

Without discussing Plato's other references to the subject, it may be said that, as was the case with the use of the term *μίμησις*, so the chief characteristics of tragedy and comedy as formulated by Aristotle and his successors were based on current, popular phrases, and it was Aristotle's concise summary of those characteristics in his dialogue *On Poets* which, as we shall see, determined Greek theory, rather than his technical discussion in the *Poetics*.

ARISTOPHANES OF BYZANTIUM

One of the personalities whose influence was most important in disseminating the formulas of *On Poets* was Aristophanes of Byzantium, the successor of Eratosthenes as head of the Library in Alexandria. According to Sandys, ⁴ "in scholarship he holds, with Aristarchus, one of the foremost places in the ancient world." A direct line leads from Aristotle, through Theophrastus and the Alexandrines, including Eratosthenes and Aristophanes, to the Romans, including Cicero, Varro, and Suetonius, and thus to the Middle Ages. ⁵ The Arguments preceding the plays of the three tragic poets and of Aristophanes represent an abridged form of his introductions, which were founded on the re-

¹ *Republic*, X, 605 B-608 A.

² *Laws*, II, 658 B.

³ *Laws*, VII, 816 B-817.

⁴ J. E. Sandys, *History of Classical Scholarship*, I (Cambridge, 1906), p. 126.

⁵ U. von Wilamowitz-Moellendorff, *Euripides Herakles*, I (Berlin, 1889),

search of Aristotle and other Peripatetics.¹ These and the scholia agree in accepting the traditional definitions, since many of the critical judgments expressed clearly rest on them, and it is worth noting again that in such an obvious opportunity for the citation of the *Poetics*, no indisputable use is made of that source.²

For the conception of comedy entertained by Aristophanes of Byzantium, we have the celebrated phrase on Menander ascribed to him by Syrianus: "O Menander and Life, which indeed of you is imitation?"³ The poet's re-creation of life is deemed so excellent that it receives the highest praise known to ancient critics, the imitation and the thing imitated can hardly be distinguished.⁴

Various remarks in the Argument to the *Orestes* of Euripides show a disapproval of the ending, based on the traditional definition. Such criticism is found in the original Argument by Aristophanes of Byzantium himself as well as in the versions composed by later followers.⁵ The observations on *Orestes* 1691 expand the point, with some interest-

¹ Particularly the *didascaliae* of Aristotle. Cf. Wilamowitz, *op. cit.*, pp. 144 ff.; also A. Nauck, *Aristophanis Byzantii Grammatici Fragmenta* (Halle, 1848).

² W. Dindorf, *Scholia Graeca in Euripidis Tragoedias ex Codicibus Aucta et Emendata* (4 vols., Oxford, 1863); E. Schwartz, *Scholia in Euripidem* (2 vols., Berlin, 1887). In the case of Aristophanes of Byzantium, as in that of others to follow, the statements of the commentators are considered together with the original work.

³ Ch. Walz, *Rhetores Graeci* (Stuttgart, 1836), IV, 101: "Ὁ Μένανδρε καὶ βίε, πότερος ἄρ' ὑμῶν πότερον ἀπεμιμήσατο;

⁴ It was natural and usual for the rhetoricians to admire Menander for the value to public speakers of a study of his style. Cf. James W. Cohoon, *Rhetorical Studies in the Arbitration Scene of Menander's Epitrepontes* (Boston, 1915), who cites (p. 141) Quintilian, X, i, 69-71. Cf. also G. Kaibel, *Comicorum Graecorum Fragmenta* (Berlin, 1899), [CGF], p. 82: Hermogenes, Περὶ μεθόδου δεινότητος, c. 34, Περὶ τοῦ κωμικῶς λέγειν. 14. *idem ibid.* c. 36. δημηγορία διάλογος κωμωidia τραγωidia συμπόσια Σωκρατικά διὰ τινος διπλῆς μεθόδου πάντα πλέκεται . . . κωμωιδίας δὲ πλοκή πικρὰ καὶ γελοία, τῶν μὲν πικρῶν σωφρονιζόντων, τῶν δὲ γελοίων παραμυθουμένων κτλ.

⁵ Dindorf, *op. cit.*, II, p. 5: (Argumentum Orestis. 'Αριστοφάνους γραμματικῷ ὑπόθεσις). τὸ δὲ δράμα κωμικωτέραν ἔχει τὴν καταστροφὴν.

Ibid. p. 7 (Argumentum Orestis) τὸ δὲ δράμα τῆς Ἑκάβης καὶ τοῦ παρόντος δράματος τὸ τέλος ἀπὸ πένθους ἄρχονται καὶ λήγουσιν εἰς χαράν.

Ibid. p. 9: (Argumentum Orestis) ἐκ λύπης γὰρ ἄρχεται καὶ εἰς λύπην τελευτᾷ. τὸ παρὸν δὲ δράμα ἐστὶν ἐκ τραγικοῦ κωμικόν. λήγει γὰρ εἰς τὰς παρ' Ἀπόλλωνος διαλλαγὰς ἐκ συμφορῶν εἰς εὐθυμίαν κατηντηκός. ἡ δὲ κωμωidia γέλωσι καὶ εὐφροσύναις ἐνύφονται.

ing comparisons, thoroughly in the spirit of this school.¹ The same point is not overlooked in the *Poetics*, but it is more concisely and emphatically expressed in the dialogue from which the grammarians seem to have derived the idea, since there are no other indications of parallels to the technical treatise in the productions of this school.²

The *Alcestis* of Euripides also aroused adverse comment by this group of grammarians, led by the head of the school.³ The discussion, thus begun, has been continued by Tzetzes and others down to the present day.⁴ An observation on *Andromache* 32, however, takes pains to point out the presence of the proper elements for genuine tragedy in the play.⁵

This point of view is to be found also in the comments on the *Ajax* of Sophocles (lines 1123 and 1127)⁶ as well as on the same poet's *Electra*.⁷ But in this case, as in others, space does not permit the cita-

¹ *Ibid.*, p. 347: 'Τοῦτο τὸ δρᾶμα ἐκ τραγικοῦ κωμικόν· ἐκ γὰρ συμφορῶν εἰς εὐθυμίαν κατήντησεν . . . Ἡ κατάληξις τῆς τραγωδίας ἢ εἰς θρῆνον, ἢ εἰς πάθος καταλίνει, ἢ δὲ τῆς κωμωδίας εἰς σπονδὰς καὶ διαλλαγὰς. ὅθεν ὁρᾶται τόδε τὸ δρᾶμα κωμικῇ καταλήξει χρησάμενον· διαλλαγαὶ γὰρ πρὸς Μενέλαον καὶ Ὀρέστην. ἀλλὰ καὶ ἐν τῇ Ἀλκῆστιδι ἐκ συμφορῶν εἰς εὐφροσύνην καὶ ἀναβιοτήν. καὶ ὁμοίως καὶ ἐν Τυροῖ Σοφοκλέους ἀναγνωρισμὸς κατὰ τὸ τέλος γίνεταί, καὶ ἀπλῶς εἰπεῖν πολλὰ τοιαῦτα ἐν τῇ τραγωδίᾳ εὐρίσκεται.

² Cf. A. Trendelenburg, *Grammaticorum Graecorum de Arte Tragica Iudiciorum Reliquiae*. Diss. (Bonn, 1867.)

³ Dindorf, *op. cit.*, IV, p. 87: (Argumentum Alcestidis. Ἀριστοφάνους Γραμματικοῦ ὑπόθεσις). τὸ δὲ δρᾶμα κωμικωτέραν ἔχει τὴν καταστροφὴν. . . . Τὸ δὲ δρᾶμά ἐστι σατυρικώτερον, ὅτι εἰς χαρὰν καὶ ἡδονὴν καταστρέφει. παρὰ τῶν τραγικῶν ἐκβάλλεται ὡς ἀνοίκεια τῆς τραγικῆς ποιήσεως ὃ τε Ὀρέστης καὶ ἡ Ἀλκῆστις, ὡς ἐκ συμφορᾶς μὲν ἀρχόμενα, εἰς εὐδαιμονίαν δὲ καὶ χαρὰν λήξαντα, ἃ ἐστὶ μᾶλλον κωμωδίας ἐχόμενα.

⁴ Cf. H. W. Hayley, *The Alcestis of Euripides* (Boston, 1898), pp. xxiii-xxiv, who cites seven different theories, with the relevant literature.

⁵ Dindorf, *op. cit.*, IV, p. 129: λέγει γὰρ ὡς νιν φαρμάκοις κεκρυμμένοις. οἱ φαύλως ὑπομνηματισάμενοι ἐγκαλοῦσι τῷ Εὐριπίδῃ φάσκοντες ἐπὶ τραγικοῖς προσώποις κωμωδίαν αὐτὸν διατεθεῖσθαι· γυναικῶν τε γὰρ ὑπονοίας κατ' ἀλλήλων καὶ ζήλους καὶ λοιδορίας καὶ ἄλλα ὅσα εἰς κωμωδίαν συντελεῖ, ταῦτα ἀπαξάπαντα τοῦτο τὸ δρᾶμα ἀπειληφέναι, ἀγνοοῦντες. ὅσα γὰρ εἰς τραγωδίαν συντελεῖ, ταῦτα περιέχει, τὸν θάνατον τοῦ Νεοπτολέμου καὶ θρῆνον Πηλέως ἐν τέλει, ἅπερ ἐστὶ τραγικά.

⁶ P. N. Papageorgius, *Scholias in Sophoclis Tragoedias Vetera* (Leipzig, 1888), p. 85: 1123. τὰ τοιαῦτα σοφίσματα οὐκ οἰκεία τραγωδίας· μετὰ γὰρ τὴν ἀναίρεσιν ἐπεκτεῖναι τὸ δρᾶμα θελήσας ἐψυχρεύσατο καὶ ἔλυσε τὸ τραγικὸν πάθος. 1127. τὸ δὲ τοιοῦτο κωμωδίας μᾶλλον οὐ τραγωδίας.

⁷ *Ibid.*, p. 103: 62. καὶ μὴ τῶν θαυμαστῶν εἶναι δόξῃ (εἰ) ἐν τραγωδίᾳ καὶ μύθῳ παλαιῷ τετόλμηκέ τι κακὸς εἰπεῖν καὶ προσκρουστικὸν εἰς τοὺς καθ' αὐτὸν ὃ μᾶλλον ἤρμοζε κωμωδίᾳ.

tion and close analysis of all the passages which exhibit a reliance on the traditional formulas. Those given should, however, serve to illustrate the persistence of definitions which we find most clearly recorded, among surviving texts, by the Roman grammarians.

POLYBIUS

The familiar conceptions of tragedy and comedy are indicated in Polybius, who contrasts drama and history in favor of his own subject.¹ In another place he declares that dwelling upon misfortunes is more appropriate to tragedy than to history.²

DIONYSIUS THRAX

Dionysius Thrax was a pupil of Aristarchus, and wrote the earliest Greek grammar, a brief work,³ which continued popular for many centuries. It was commented upon by scholars down to the time of the Italian Renaissance. The expression of Dionysius with regard to tragedy was: "Ἰνα τὴν μὲν τραγωδίαν ἡρωϊκῶς ἀναγνῶμεν, and for comedy, τὴν δὲ κωμωδίαν βιωτικῶς.⁴ The commentators, in keeping with the tradition of *On Poets*, stressed the words ἡρωϊκῶς and βιωτικῶς as most significant.

¹ T. Büttner-Wobst, *Polybii Historiae* II, 56 (Vol. I, Leipzig, 1905, pp. 192-193): δεῖ τοιγαροῦν οὐκ ἐπιπλήττειν τὸν συγγραφέα τερατευόμενον διὰ τῆς ἱστορίας τοὺς ἐν-τυγχάνοντας οὐδὲ τοὺς ἐνδεχομένους λόγους ζητεῖν καὶ τὰ παρεπόμενα τοῖς ὑποκειμένοις ἐξαριθμεῖσθαι, καθάπερ οἱ τραγωδιογράφοι, τῶν δὲ πραχθέντων καὶ ῥηθέντων κατ' ἀλήθειαν αὐτῶν μνημονεῖν πάμπαν, (κ)ἂν πάνυ μέτρια τυγχάνωσιν ὄντα. τὸ γὰρ τέλος ἱστορίας καὶ τραγωδίας οὐ ταῦτόν, ἀλλὰ τοῦναντίον. ἐκεῖ μὲν γὰρ δεῖ διὰ τῶν πιθανωτάτων λόγων ἐκπληῆσαι καὶ ψυχαγωγῆσαι κατὰ τὸ παρὸν τοὺς ἀκούοντας, ἐνθάδε δὲ διὰ τῶν ἀληθινῶν ἔργων καὶ λόγων, κτλ.

² Polybius, XV, 36. (Büttner-Wobst, III, p. 315).

³ Cf. G. Hoerschelmann, *De Dionysii Thracis Interpretibus Veteribus*, Leipzig, 1874. A. Hilgard, *De Artis Grammaticae ab Dionysio Thrace Compositae Interpretationibus Veteribus in Singulos Commentarios Distribuendis*. (Progr.) Leipzig, 1880. A. Hilgard, *Scholia in Dionysii Thracis Artem Grammaticam*. (Grammatici Graeci. Pars tertia. Leipzig, 1901.) T. Davidson, *The Grammar of Dionysius Thrax Translated from the Greek*. St. Louis, Missouri, 1874.

⁴ Immanuel Bekker, *Anecdota Graeca*. II (Berlin, 1816), p. 629: 'Ανάγνωσις ἐστὶ ποιημάτων ἢ συγγραμμάτων ἀδιάπτωτος προφορά. 'Αναγνωστέον δὲ καθ' ὑπόκρισιν, κατὰ προσωδίαν, κατὰ διαστολήν. ἐκ μὲν γὰρ τῆς ὑποκρίσεως τὴν ἀρετὴν, ἐκ δὲ τῆς προσωδίας τὴν τέχνην, ἐκ δὲ τῆς διαστολῆς τὸν περιεχόμενον νοῦν ὀρώμεν. Ἰνα τὴν μὲν τραγωδίαν, κτλ.

The commentaries of Diomedes and Melampus¹ on Dionysius Thrax are inextricably combined,² and they can for our purposes be conveniently considered together.³ The influence of etymology in accounting for the origin of the dramatic species and giving a suggestion of their nature, an element present also in the *Poetics*, receives ingenious development in these commentaries.⁴

The purposes of tragedy and comedy are stated in a short notice prefixed to Aristophanes,⁵ emanating from the school of Dionysius Thrax.⁶ In this and other scholia of the same group are to be found the eventual sources from which many of the apparently strange mediaeval glosses were derived.⁷ The moral effect of tragedy, according to these

¹ Floruit 7th century. Cf. F. Susemihl, *Geschichte der Griechischen Litteratur in der Alexandrinerzeit* (Leipzig, 1891), II, p. 173, note.

² Kaibel, *CGF*, p. 10, note: *Scholia haec omnia Melampodis, si codici Hamburgenſi, Diomedis, si Burbonico credas.*

³ Cf. Hoerschelmann, *op. cit.*, pp. 27 ff., Kaibel, *CGF*, p. 11. There is apparent reference to the censorious character of the Old Comedy in the following, but the explanation of βιωτικῶς is interesting. κωμωιδία ἐστὶν ἡ ἐν μέσῳ λαοῦ κατηγορία ἡγουν δημοσιεύσεις. εἴρηται δὲ παρὰ τὸ κῶμη καὶ τὸ ωιδή, ἐστὶ δὲ εἶδος ποιήματος ἐν κῶμας κατὰ τὸν βίον αἰδόμενον. διὰ τοῦτο καὶ βιωτικῶς λέγεται τουτέστιν ἱλαρῶς, ὡς ἂν εὖξαιτό τις βιώναι, ἀντὶ τοῦ ἐν ἡδονῇ καὶ γέλῳτι. δεῖ οὖν τῷ τὴν κωμωιδίαν ὑποκρινόμενῳ μετὰ γέλῳτος καὶ πολλῆς ἀστειότητος καὶ ἱλαροῦ τοῦ προσώπου προσφέρεσθαι. ἡ βιωτικῶς κατὰ μίμησιν τοῦ βίου, ἵνα ἂν μὲν ὑπόκειται γέρον, μιμησώμεθα τὴν φωνὴν τοῦ γέροντος· εἰ δὲ γυνή, μιμησώμεθα τὴν φωνὴν τῆς γυναικός. διαφέρει δὲ κωμωιδία τραγωιδίας ὅτι ἡ τραγωιδία ἱστορίαν ἔχει καὶ ἀπαγγελίαν πράξεων γενομένων, ἡ δὲ κωμωιδία πλάσματα περιέχει βιωτικῶν πραγμάτων.

⁴ Cf. Hilgard, *Scholia*, p. 18, lines 3 and 13; p. 20, line 7. Cf. Kaibel, *CGF*, p. 11. ἡ δὲ ἐτυμολογία τῆς τραγωιδίας ἐστὶν αὕτη· ἡ ὅτι τράγον ἐλάμβανον ἑπαθλον οἱ νικῶντες, οἷονεῖ ἡ ἐπὶ τράγῳ ωιδή. ἡ ὅτι τοῦ ᾗ τρεπομένου εἰς ᾧ νοεῖται τραγωιδία ἡ τραχεῖα ωιδή· τραχύτερον γὰρ καὶ φευκτέον καὶ δύσβατον τὸ τῶν θρῆνων εἶδος τοῦ γελωτοποιεῖν. ἡ οἷονεῖ τετραγωνιδία. οἱ γὰρ χορευταὶ αὐτῶν ἐν τετραγώνῳ σχήματι ἱστάμενοι τὰ τῶν τραγικῶν ἐπεδείκνυντο, κτλ.

⁵ Kaibel, *CGF*, p. 12, note: "a dextra adscripti dissertatiunculam Περὶ τῆς κωμωιδίας in libris Aristophaneis servatam Laurentiano θ Ambrosiano A, praeterea in editione Aldina."

⁶ Kaibel, *CGF*, p. 14, line 45: καὶ τῆς μὲν τραγωιδίας σκοπὸς τὸ εἰς θρῆνον κινήσαι τοὺς ἀκροατάς, τῆς δὲ κωμωιδίας τὸ εἰς γέλῳτα. διό, φασίν, ἡ μὲν τραγωιδία λύει τὸν βίον, ἡ δὲ κωμωιδία συνίστησιν.

⁷ Cf. Hilgard, *Scholia*, p. 306, line 15, for a somewhat different discussion from the *Scholia Marciana*: <Heliodori> κωμωδία ἐστὶν ἡ ἐν μέσῳ λαοῦ κατηγορία καὶ δημοσιεύσεις· εἴρηται δὲ κωμωδία ἀπὸ τοῦ ἐν ταῖς κῶμας καὶ ἐν τοῖς δήμοις ᾄδεσθαι. Ἑρωϊκῶς

commentators, had nothing to do with the modern interpretation of the *kátharsis* mentioned in the *Poetics*, a work which may have been known to them, but was by them apparently judged to be unimportant. Codex C of the commentaries of Melampus or Diomedes,¹ states the case for tragedy, together with some observations on the measures taken by the actors to secure the proper effect of grandeur. The justification of tragedy, as will be seen, depends upon the moral edification to be derived by citizens from seeing the evil which fell to the lot of even great heroes because of their errors. Tragedy thus furnished a warning against wrong-doing, to the spectators in the theatre.

Some of the remarks apply rather to the duties of the actors than to the nature of the dramatic species, but as can be seen from the context and from other passages already quoted, they did not preclude the traditional definitions of the dramatic species.² Possible reference to

οὖν μετὰ πολλῆς σεμνότητος καὶ ἐπηρμένης φωνῆς μιμουμένους τοὺς ἥρωας, βιωτικῶς δὲ μετὰ γέλωτος καὶ πολλῆς ἀστεϊότητος καὶ ἱλαρότητος ὑποκρινομένους τὰ βιωτικά καὶ τὰ παρεισαγόμενα πρόσωπα. Δεῖ δὲ γινώσκειν, ὅτι πολλὴ διαφορὰ τῆς τραγωδίας καὶ τῆς κωμωδίας, ὅτι ἡ μὲν τραγωδία περὶ ἡρωϊκῶν πραγμάτων καὶ προσώπων λέγει, ἡ δὲ κωμωδία ἀπὴλλακταὶ τούτων· καὶ ὅτι ἡ μὲν τραγωδία τὰ τέλη περὶ σφαγῶν καὶ φόνων ἔχει, ἡ δὲ κωμωδία περὶ ἀναγνωρισμοῦ, καὶ ὅτι ἡ μὲν τραγωδία ἱστορίαν καὶ ἀπαγγελίαν ἔχει πράξεων γενομένων, ἡ δὲ κωμωδία διάπλασμα βιωτικῶν πραγμάτων· καὶ ὅτι πάλιν ἡ μὲν τραγωδία διαλύει τὸν βίον, ἡ δὲ κωμωδία συνίστησι.

¹ Hilgard, *Scholía*, p. 17, lines 16 ff. Kaibel, *CGF*, p. 11: τραγωιδία λέγεται τὰ τῶν τραγικῶν ποιήματα, ὡς τὰ τοῦ Εὐριπίδου καὶ Σοφοκλέους καὶ Αἰσχύλου καὶ τῶν τοιοούτων· γεγόνασι δὲ οὗτοι ἐπὶ τῶν χρόνων τῶν Ἀθηναίων. τραγικοὶ δὲ ὄντες καὶ θέλοντες ὠφελεῖν κοινῇ τοὺς τῆς πόλεως, παραλαμβάνοντές τινας ἀρχαίας ἱστορίας τῶν ἡρώων ἐχούσας πάθη τινά, ἔσθ' ὅτε καὶ θανάτους καὶ θρήνους, ἐν θεάτρῳ ταῦτα ἐπεδείκνυντο τοῖς ὁρῶσι καὶ ἀκούουσιν, ἐνδεικνύμενοι παραφυλάττεσθαι τὸ ἀμαρτάνειν. εἰ γὰρ οἱ τηλικούτοι ἥρωες τοιαῦτα ἔπασχον, δηλονότι ἀμαρτημάτων αὐτοῖς προυπηργμένων, πόσω μᾶλλον ἡμεῖς καὶ οἱ καθ' ἡμᾶς ἀμαρτήσαντες πεισόμεθα; δεῖ οὖν, ὡς προείρηται, ὡς οἶόν τε βίον ἀναμάρτητον καὶ φιλοσοφώτατον μεταδιώκειν. ἐπ' ὠφελεῖται οὖν τῶν πολιτῶν ἡ τῶν τραγικῶν πόλεις εἰσῆγετο. ἐπιδεικνύμενοι δὲ τῶν ἡρώων ὥσανεῖ τὰ αὐτῶν πρόσωπα πρῶτον μὲν ἐπελέγοντο ἄνδρας τοὺς μέλζονα φωνὴν ἔχοντας, δεύτερον δὲ βουλόμενοι καὶ τὰ σώματα δεικνύειν ἡρωϊκὰ ἐμβάδας ἐφόρου καὶ ἱματῖα ποδῆρη. ταύτην οὖν τὴν τραγωιδίαν φησὶ δεῖν ὁ τεχνικὸς ἡρωικῶς ἀναγινώσκειν, τουτέστι μεγάλῃ τῇ φωνῇ.

² Kaibel, *CGF*, p. 10: ἐκ τῆς μιμήσεως γὰρ ἐνάρετα δέκνυνται τὰ ἀναγνωσκόμενα. δεῖ γὰρ τὰ μὲν ἡρωϊκὰ συντόνῳ τῇ φωνῇ ἀναγινώσκειν καὶ μὴ ἐκλελυμένῃ, τὰ δὲ βιωτικά τουτέστι τὰ κωμικά ὡς ἐν τῷ βίῳ, τουτέστι μιμουμένους γυναῖκας νέας ἢ γραῖδας ἢ δεδοκίотas ἢ ὀργιζομένους ἄνδρας ἢ ὅσα πρέπει τοῖς εἰσαγομένοις προσώποις παρὰ Μενάνδρῳ ἢ Ἀριστοφάνει ἢ τοῖς ἄλλοις κωμικοῖς.

the *Poetics* is seen in the *Scholia Londinensia*, but the use of the word ἔμμετρος does not alter the fact that this discussion as a whole is unmistakably Peripatetic and exoteric in origin.¹ A Byzantine commentary refers to Homer for tragedy, and asserts that βιωτικῶς may mean either censure or approbation, citing the life of St. Peter in contrast with that of Julian.²

The gloss on τραγωδία in the *Etymologicum Magnum*, as Kaibel noted, is derived from the school of Dionysius Thrax or some writer following that group.³

PLUTARCH

Plutarch⁴ discusses tragedy in several places. In one passage he cites Gorgias for a paradoxical remark on the element of illusion in tragedy, which to many minds seems surprisingly modern.⁵ He disapproves of the performance of tragedy in a way which seems to have been standard doctrine among the Stoics,⁶ and he alludes to the pathos of tragedy several times.⁷

¹ Hilgard, *Scholia*, p. 475, lines 1 ff.: [*Scholia Londinensia in artis Dionysianae.*] τραγωδία ἐστὶ βίων τε καὶ λόγων ἡρωϊκῶν ἔμμετρος μίμησις ἔχουσα σεμνότητα μετὰ πλοκῆς τινος. . . . (Heliodori) — Ζητητέον δὲ εἰ καὶ τὰ τραγικά ἐστι βιωτικά· φαίνεται γὰρ καὶ αὐτὰ τῷ βίῳ γινωσκόμενα. Καὶ λεκτέον ὅτι πολλή ἡ διαφορὰ τῆς τραγωδίας καὶ τῆς κωμωδίας, ὅτι ἡ μὲν τραγωδία περὶ ἡρωϊκῶν πραγμάτων καὶ προσώπων λέγει, ἡ δὲ κωμωδία ἀπῆλλακται τούτων. . . . Καὶ ὅτι ἡ μὲν τραγωδία τὰ τέλη περὶ σφαγῶν καὶ φόνων ἔχει, ἡ δὲ κωμωδία περὶ ἀναγνωρισμοῦ· καὶ ὅτι πάλιν ἡ μὲν τραγωδία λυεῖ τὸν βίον, ἡ δὲ κωμωδία συνίστησιν. . . . Διαφέρει δὲ τραγωδία κωμωδίας, ὅτι ἡ μὲν τραγωδία ἱστορίαν καὶ ἀπαγγελίαν ἔχει πράξεων γενομένων, ἡ δὲ κωμωδία πλάσματα περιέχει βιωτικῶν πραγμάτων.

² Hilgard, *op. cit.*, p. 569, line 24: κωμωδίαν δὲ οἱ ἀρχαῖοι ψόγον καὶ περίσυρμα ἔλεγον εἶναι· ἐγὼ δὲ λέγω, ὅτι καὶ ἐπὶ ψόγου καὶ ἐπὶ ἐπαίνου λαμβάνεται. <<βιωτικῶς>> γὰρ εἶπεν ὁ τεχνικός, τουτέστιν κατὰ τὸν ἐκάστου βίον· ἔστι γὰρ βίος ἄδικος, οἷον ὁ βίος τοῦ ἀγίου Πέτρου καλός, ὁ δὲ τοῦ Ἰουλιανοῦ κακός.

³ Kaibel, *CGF*, p. 16: τραγωδία ἐστὶ βίων καὶ λόγων ἡρωϊκῶν μίμησις.

⁴ On Plutarch's merits as a critic, cf. Sandys, *op. cit.*, I, p. 304.

⁵ *Quomodo adolescens poetas audire debeat*, 15 D., in G. N. Bernardakis, *Plutarchi Chaeronensis Moralia*, I (Leipzig, 1888), p. 35: Γοργίας δὲ τὴν τραγωδίαν εἶπεν ἀπάτην, ἣν ὁ τ' ἀπατήσας δικαιοτέρος τοῦ μὴ ἀπατήσαντος καὶ ὁ ἀπατηθεὶς σοφώτερος τοῦ μὴ ἀπατηθέντος. Cf. F. M. Padelford, *Essays on the Study and Use of Poetry by Plutarch and Basil the Great* (Yale Studies in English, XV, New York, 1902).

⁶ *De Gloria Atheniensium*, 348 D. (Bernardakis, *op. cit.*, II, p. 463.)

⁷ *Qua quis ratione se ipse sine invidia laudet* (*Quaestionum convivialium*, VII, 711 E). (Bernardakis, *op. cit.*, IV, p. 289.)

"LONGINUS" ON THE SUBLIME

In the ninth chapter of the treatise *On the Sublime*¹ (first century A.D.) ascribed to Dionysius Longinus in every edition from 1554 to 1808² occurs a passage which, according to Saintsbury,³ illustrates "the Classical distrust of, and distaste for, the Romantic, and the comparatively low estimate of manners and characters." The significant sentence is: "For such are the details which Homer gives, with an eye to characterization, of life in the home of Odysseus; they form, as it were, a comedy of manners."⁴ But this is merely another instance of the familiar ancient view expressed by Aristotle and others, that tragedy finds a parallel in the *Iliad* and comedy in the *Odyssey*.⁵

As Roberts points out,⁶ this chapter presents another familiar manner of contrasting the two species, that between *ἥθος* and *πάθος*.⁷ This distinction, touched upon by Aristotle in the *Rhetoric*, and continued by other rhetoricians, is made very clear in the treatise *On the Sublime*, where it is stated that, "passion is as intimately allied with solemnity⁸ as sketches of character with entertainment."⁹

EPICTETUS

The Stoic attitude toward tragedy necessarily implies the tradi-

¹ A MS. of the treatise in Florence is more properly entitled: *ἀνωνύμου περὶ ὕψους*.

² Sandys, *op. cit.*, I, pp. 288 ff.

³ George Saintsbury, *Loci Critici* (Boston, 1903), p. 44.

⁴ W. R. Roberts, *Longinus on the Sublime* (Cambridge, 1899), IX, 15 (pp. 68-69). "Longinus," *On the Sublime*, translated by W. Hamilton Fyfe (Loeb Classical Library, London and New York, 1927), p. 154: *τοιαῦτα γὰρ που τὰ περὶ τὴν τοῦ Ὀδυσσεύς ἥθικῶς αὐτῷ βιολογούμενα οἰκίαν, οἷον εἰ κωμῳδία τίς ἐστὶν ἡθολογούμενη*.

⁵ *Poetics*, 1448 b 9. Cf. Kaibel, *CGF*, p. 37, on Homer, according to Tzetzes:

*Ὅμηρός ἐστι καὶ πατὴρ κωμωδίας
καὶ σατυρικῆς ἅμα καὶ τραγωδίας
ἄλλης τε πάσης ἐν λόγοις εὐτεχνίας.*

⁶ Roberts, *op. cit.*, p. 200, note on IX, 15.

⁷ Roberts here cites Cicero, *Orator*, 37, 128. (Should be 28, 128.)

⁸ Cf. Chr. Walz, *Rhetores Graeci*, IX, p. 594: [ἐκ τῶν ΛΟΓΓΙΝΟΥ ΠΕΡΙ ΕΥΤΕΧΝΙΑΣ] *τὸ πάθος πολὺ ἐν ποιήσει τραγικῇ*.

⁹ Roberts, *op. cit.*, pp. 116-117 (XXIX, 2). Fyfe, *op. cit.*, p. 208: *πάθος δὲ ὕψους μετέχει τοσοῦτον, ὅποσον ἥθος ἡδονῆς*.

tional formulas. Epictetus exclaims in words echoed by Boethius; "For what else is tragedy, but the dramatized sufferings of men, bewildered by an admiration of externals?"¹ Elsewhere he points out, in showing the intrinsic worthlessness of title and rank, that tragedies deal only with kings and rich men, but the poor do not experience such great disasters.² Again, he refers to the subject of tragedies, resulting from the pursuit of appearances instead of realities, and he employs the word *πάθωσιν* with regard to the tragic theme.³

MARCUS AURELIUS

The attitude of Marcus Aurelius toward the drama is not different from that of Epictetus. In one place he advises a rational acceptance of death, as opposed to the tragic obstinacy of the Christians.⁴ In the same chapter he condemns comedy and refers to tragedy as an inspiration to Stoics.⁵ Again, it will be noted, although there is a reference to

¹ H. Schenkl, *Epicteti Dissertationes*, I, 4 (Leipzig, 1898), p. 18: *Τίς λέγει ταῦτα; δοκέιτε ὅτι ὑμῖν ἄδοξόν τινα ἐρῶ καὶ ταπεινόν; Πρίαμος αὐτὰ οὐ λέγει; Οἰδίπους οὐ λέγει; ἀλλ' ὅποσοι βασιλεῖς λέγουσι. Τί γάρ εἰσιν ἄλλο τραγῳδαί, ἢ ἀνθρώπων πάθη τεθανυμένων τὰ ἐκτὸς, διὰ μέτρου τοιοῦδ' ἐπιδεικνύμενα;*

² Epictetus, I, 24, 15. (Ed. of Schenkl, p. 76.)

³ *Ibid.*, I, 28, 31. (Ed. of Schenkl, p. 90.)

⁴ H. Schenkl, *Marci Antonii Imperatoris in Semet Ipsum Libri XII* (Leipzig, 1913), p. 137. (XI, 3): *τὸ δὲ ἔτοιμον τοῦτο, ἵνα ἀπὸ ἰδικῆς κρίσεως ἐρχηται, μὴ κατὰ ψιλὴν παράταξιν, ὥς οἱ Χριστιανοί, ἀλλὰ λελογισμένως καὶ σεμνῶς καὶ ὥστε καὶ ἄλλον πείσαι, ἀτραγῳδῶς.*

⁵ Schenkl, *op. cit.*, pp. 138-139 (XI, 6): *Πρῶτον αἱ τραγῳδαί παρήχθησαν ὑπομνηστικαὶ τῶν συμβαινόντων, καὶ ὅτι ταῦτα οὕτω πέφυκε γίνεσθαι καὶ ὅτι, οἷς ἐπὶ τῆς σκηνῆς ψυχαγωγέισθε, τούτοις μὴ ἄχθεσθε ἐπὶ τῆς μέλζονος σκηνῆς. ὁρᾶται γὰρ, ὅτι οὕτως δεῖ ταῦτα περαινέσθαι, καὶ ὅτι φέρουσιν αὐτὰ καὶ οἱ κεκραγότες. "ὶὼ Κιθαιρών." καὶ λέγεται δὲ τινα ὑπὸ τῶν τὰ δράματα ποιούντων χρησίμως· οἷόν ἐστιν ἐκεῖνο μάλιστα·*

*εἰ δ' ἡμελήθην ἐκ θεῶν καὶ παῖδ' ἐμῶ,
ἔχει λόγον καὶ τοῦτο·*

καὶ πάλιν·

τοῖς πράγμασιν γὰρ οὐχὶ θυμοῦσθαι·

καὶ

βλον θερίζειν ὥστε κάρπιμον στάχυν·

καὶ ὅσα τοιαῦτα. μετὰ δὲ τὴν τραγῳδίαν ἡ ἀρχαία κωμῳδία παρήχθη παιδαγωγικὴν παρρησίαν ἔχουσα καὶ τῆς ἀτυφίας οὐκ ἀχρήστως δι' αὐτῆς τῆς εὐθυρρημοσύνης ὑπομιμνή-

the moral utility of tragedy, there is no mention of the *κάθαρσις* of the *Poetics* in any sense.

ATHENAEUS

Among the precious relics of erudition preserved in Athenaeus¹ are passages from Antiphanes² and Timocles³ which emphasize the same distinctions as to proper subject, style, invention, and moral purpose which were traditional.

σκουσα· πρὸς οἶόν τι καὶ Διογένης ταυτὶ παρελάμβανεν. μετὰ ταύτην δὲ ἡ μέση κωμῳδία καὶ λοιπὸν ἡ νέα πρὸς τί ποτε παρελήφεται, ἢ κατ' ὀλίγον ἐπὶ τὴν ἐκ μιμήσεως φιλοτεχνίαν ὑπερρῆν, ἐπίστησον. ὅτι μὲν γὰρ λέγεται καὶ ὑπὸ τούτων τινὰ χρήσιμα, οὐκ ἀγνοεῖται· ἀλλὰ ἡ ὅλη ἐπιβολὴ τῆς τοιαύτης ποιήσεως καὶ δραματοουργίας πρὸς τίνα ποτὲ σκοπὸν ἀπέβλεψεν;

¹ A. Meineke, *Athenaei Deipnosophistae* (Leipzig, 1858); G. Kaibel, *Athenaei Naucratisae Deipnosophistarum Libri XV* (Leipzig, 1887).

² Meineke, *op. cit.*, I, p. 394: 'Ἐπειδὴ ἀπαιτεῖς συνεχῶς ἀπαντῶν, ἐταῖρε Τιμόκρατες, τὰ παρὰ τοῖς δειπνοσοφισταῖς λεγόμενα, καινὰ τινα νομίζων ἡμᾶς εὐρίσκειν, ὑπομνήσομέν σε τὰ παρ' Ἀντιφάνει λεγόμενα ἐν Ποιήσει τόνδε τὸν τρόπον

μακάριόν ἐστιν ἡ τραγωδία
ποίημα κατὰ πάντ'· εἴ γε πρῶτον οἱ λόγοι
ὑπὸ τῶν θεατῶν εἰσιν ἐγνωρισμένοι,
πρὶν καὶ τιν' εἰπεῖν, ὥς ὑπομνήσαι μόνον
δεῖ τὸν ποιητὴν. Οἰδῖπουν γὰρ ἂν μόνον
φῶ, τὰλλα πάντ' ἴσασιν· ὁ πατήρ Λάιος,
μήτηρ Ἰοκάστη, θυγατέρες, παῖδες τίνες,
τί πείσῃ οὗτος, τί πεποίηκεν. ἂν πάλιν
εἴπῃ τις Ἀλκμέονα, καὶ τὰ παῖδια
πάντ' εὐθὺς εἴρηχ', ὅτι μανεῖς ἀπέκτονεν
τὴν μητέρ', ἀγανακτῶν δ' Ἀδραστος εὐθέως
ῥῆξει, πάλιν τ' ἄπεισι.
ἔπειθ', ὅταν μὴδὲν δύνωντ' εἰπεῖν ἔτι,
κομιδῇ δ' ἀπειρήκωσιν ἐν τοῖς δράμασιν,
αἴρουσιν ὥσπερ δάκτυλον τὴν μηχανήν,
καὶ τοῖς θεωμένοισιν ἀποχρώντως ἔχει.
ἡμῖν δὲ ταῦτ' οὐκ ἔστιν, ἀλλὰ πάντα δεῖ
εὐρεῖν, ὀνόματα καινὰ, τὰ διωκημένα
πρότερον, τὰ νῦν παρόντα, τὴν καταστροφὴν,
τὴν εἰσβολήν. ἂν ἔν τι τούτων παραλίπῃ

(Note 3 on page 115).

TZETZES

Tzetzes (1110-1180) is called by Sandys¹ "dull as a writer and untrustworthy as an authority."² His first prooemium to Aristophanes is similar to part of the scholia of Diomedes on Dionysius

Χρέμης τις ἢ Φείδων τις ἐκσυρίττεται·
 Πηλεῖ δὲ πάντ' ἕξεστι καὶ Τεύκρῳ ποιεῖν.
 Δίφιλος δ' ἐν Ἑλενηφοροῦσιν
 ᾧ τόνδ' ἐποπτεύουσα καὶ κεκτημένη
 Βραυρῶνος ἱεροῦ θεοφιλέστατον τόπον,
 Λητοῦς Διὸς τε τοξόδαμνε παρθένε,
 ὥς οἱ τραγωδοὶ φασίν, οἷς ἐξουσία
 ἔστιν λέγειν ἅπαντα καὶ ποιεῖν μόνοις.

³ *Ibid.*, pp. 395 ff.: Τιμοκλῆς δ' ὁ κωμωδιοποιὸς κατὰ πολλὰ χρησίμην εἶναι λέγων τῷ βίῳ τὴν τραγωδίαν φησὶν ἐν Διονυσιαζούσαις . . .

τοὺς γὰρ τραγωδοὺς πρῶτον, εἰ βούλει, σκόπει,
 ὥς ὠφελοῦσι πάντας. ὁ μὲν ὦν γὰρ πένης
 πτωχότερον αὐτοῦ καταμαθὼν τὸν Τήλεφον
 γενόμενον ἤδη τὴν πενίαν ῥᾶον φέρει·
 ὁ νοσῶν δὲ μαρτυρῶς Ἀλκμήνων' ἐσκέψατο·
 ὀφθαλμοὶ τις, εἰσὶ Φινεΐδαι τυφλοί.
 τέθνηκε τῷ παῖσι, ἢ Νιόβῃ κεκούφικεν.
 χωλὸς τίς ἐστι, τὸν Φιλοκτήτην ὄρᾳ.
 γέρον τις ἀτυχεῖ, κατέμαθεν τὸν Οἰνέα.
 ἅπαντα γὰρ τὰ μείζον' ἢ πέπονθέ τις
 ἀτυχήματ' ἄλλοις γεγονότ' ἐννοούμενος
 τὰς αὐτὰς αὐτοῦ συμφορὰς ῥᾶον φέρει.

¹ Sandys, *op. cit.*, I, 419.

² Cf. Chr. Harder, *De Ioannis Tzetzae Historiarum Fontibus Quaestiones Selectae* (Kiel, 1886). Tzetzes places Aristotle before all others who have dealt with comedy: cf. Kaibel, *CGF*, pp. 20, 23: ὕστερον δὲ ταύτας ἀπάσας σκηνικάς τε καὶ ποιητικάς πλεῖστοι ἐξηγήσαντο, . . . ὥς καὶ πρὸ αὐτῶν πάντων Ἀριστοτέλης. But he actually seems to have read little of the Philosopher and he confuses Aristotle with Aristarchus. Cf. Harder, p. 69: "Aristotelis pauca scripta legerat: De mundo c. 2: ad Lyc. 255. Exeg. II. p. 33. — De coelo I, 9: Alleg. II. Θ, 180. — Hist. Anim. VIII, 6. cf. II, 17. Inc. anim. 10: Chil. IX, 113. Exeg. II. p. 70, 27 confundit Aristotelem cum Aristarcho, v. Orion, p. 93, 17s." Harder, p. 49, says of him: "Quamquam neque tales eius sunt errores neque tam gravia quae de suo addidit, ut alterum Ptolemaeum Chennum nominare liceat, et quamquam excusari poterit respicienti similiter permultos aequales eius suos composuisse, tamen summae levitatis malaeque fidei convictus est."

Thrax.¹ It is, however, the reference to *κάθαρσις*² which has attracted the attention of some writers³ to Tzetzes and the *Tractatus Coislinianus*,⁴ but the inferences drawn thence with regard to an Aristotelian theory of comedy as originally found in a lost book of the *Poetics* are more than doubtful. Tzetzes repeats the adverse judgments of the school of Aristophanes on the *Orestes* and *Alcestis* of Euripides, on the *Electra* of Sophocles, and condemns the *Heracles* particularly, his basis being the formula of Aristophanes on the aims of tragedy and comedy.⁵

In his *Prolegomena to Lycophron*,⁶ Tzetzes briefly repeats points already made.⁷ Again, in his "Verses on the Differences Between Poets,"⁸ he reproduces the usual matter, and his view of the moral purpose of tragedy expressed in lines 57 ff., is strangely overlooked by

¹ Kaibel, *CGF*, p. 17: "Proemia . . . nullo auctoris nomine insignita e codice Parisino . . . recensuit Studemund. Ioannes Tzetzta prooemii auctor videtur."

² Kaibel, *CGF*, p. 17: ἐστὶ δὲ κωμωιδία μίμησις πράξεως . . . καθαρτήριος παθημάτων, συστατικὴ τοῦ βίου, διὰ γέλωτος καὶ ἡδονῆς τυπουμένη. διαφέρει δὲ τραγωιδία κωμωιδίας ὅτι ἡ μὲν τραγωιδία ἱστορίαν ἔχει καὶ ἀπαγγελίαν πράξεων γενομένων, κἂν ὡς ἤδη γινομένης σχηματίζῃ αὐτάς, ἡ δὲ κωμωιδία πλάσματα περιέχει βιωτικῶν πραγμάτων. καὶ ὅτι τῆς μὲν τραγωιδίας σκοπὸς τὸ εἰς θρῆνον κινήσαι τοὺς ἀκροατάς, τῆς δὲ κωμωιδίας εἰς γέλωτα.

³ Rutherford, Starkie, and Cooper. Cf. Cooper, *Aristotelian Theory of Comedy* (New York, 1922), pp. 10 ff., 224 ff.

⁴ Kaibel, *CGF*, p. 50. κωμωιδία ἐστὶ μίμησις πράξεως γελοίου καὶ ἀμοίρου μεγέθους τελείου, χωρὶς ἐκάστου τῶν μορίων ἐν τοῖς εἶδεσι, δρώντων καὶ (οὐ) δι' ἀπαγγελίας, δι' ἡδονῆς καὶ γέλωτος περαίνουσα τὴν τῶν τοιούτων παθημάτων κάθαρσιν· ἔχει δὲ μητέρα τὸν γέλωτα.

⁵ Kaibel, *CGF*, p. 21, l. 50: ἴδιον δὲ κωμωιδίας μὲν τὸ μεμιγμένον ἔχειν τοῖς σκώμασι γέλωτα, τραγωιδίας δὲ πένθη καὶ συμφοράς.

Cf. also l. 64: τέλος δὲ τραγωιδίας μὲν λύνει τὸν βίον, κωμωιδίας δὲ συνιστᾷ αὐτόν κτλ.

⁶ Lycophron (born c. 330/325 B.C.) was responsible for the arrangement of the comic poets in the Alexandrine library. His work on comedy, in eleven books, is of such inferior quality, to judge by available fragments, that it may well have been the pedantic source of much that is unprofitable and confusing in Tzetzes and the *Tractatus Coislinianus*. Cf. Sandys, *op. cit.*, I, p. 122.

⁷ Kaibel, *CGF*, p. 34.

⁸ Kaibel, *CGF*, pp. 34 ff.: ΙΩΑΝΝΟΥ ΤΟΥ ΤΖΕΤΖΟΥ ΣΤΙΧΟΙ ΠΕΡΙ ΔΙΑΦΟΡΑΣ ΠΟΙΗΤΩΝ.

those critics who value his use of the word *κάθαρσις* so highly.¹ He frequently cites the early grammarian Euclid,² particularly in connection with his own verses on tragic poetry, where he gives a definition of tragedy of some interest.³

Together with Tzetzes, the *Tractatus Coislinianus* is usually cited by those who wish to discover traces of the survival of an Aristotelian theory of comedy deriving ultimately from the *Poetics*. In my previous article in 1917 I discussed the mechanical character of the *Tractatus* and showed how it fails to supply evidence unavailable to the keen pedants who composed it from other extant writings of Aristotle. The

¹ *Ibidem.*, pp. 36-37.

κλήσις δὲ τοῖς σύμπασιν ἦν τραγωιδία.
 χρόνῳ διηρέθη δὲ κλήσις εἰς τρία,
 κωμωιδίαν ἅμα τε καὶ τραγωιδίαν
 καὶ σατυρικὴν τῶνδε τὴν μεσαιτάτην.
 ὅσον μὲν οὖν ἔσχηκε τὴν θρηνωιδίαν
 τραγωιδίαν ἔφασαν οἱ κριταὶ τότε·
 ὅσον δὲ τοῦ γέλωτος ἦν καὶ σκωμμάτων,
 κωμωιδίαν ἔθεντο τὴν κλήσιν φέρειν.
 ἅμφω δὲ πρὸς σύστασιν ἦσαν τοῦ βίου·
 ὁ γὰρ τραγικὸς τῶν πάλαι πάθη λέγων,
 'Ρήσους, 'Ορέστας, Φοίνικας, Παλαμήδεις,
 τοὺς ζῶντας ἐξήλυνεν ἀγερωχίας.
 ὁ κωμικὸς δὲ πως γελῶν κωμωιδίαις
 ἄρπαγὰ τινα καὶ κακοῦργον καὶ φθόρον
 τὸ λοιπὸν ἠδραίωσεν εἰς εὐκοσμίαν.
 οὕτω λύει μὲν ἡ τραγωιδία βίον,
 βαθροῖ δὲ καὶ πηγνυσιν ἡ κωμωιδία
 καὶ σατυρικὴ σὺν ἅμα κωμωιδίαι,
 ὁμοῦ σκυθρωποῖς τῇ χαρᾷ μεμιγμένη.

² Kaibel, *CGF*, p. 43: ΠΕΡΙ ΤΡΑΓΙΚΗΣ ΠΟΙΗΣΕΩΣ

"Ἀκουε λοιπὸν καὶ τὰ τῆς τραγωιδίας,
 πόνοις περισσοῖς πρὶν ἐμοὶ συνηγμένα
 ἐξ ὧν ὁ Εὐκλείδης τε καὶ λοιποὶ πόσοι
 ἔγραψαν ἄνδρες ἐν λόγοις διηρμένον.

³ *Ibid.*, p. 48:

ἐπεὶ δὲ καλῶς πάντα σοίπερ ἐγράφη,
 ἄκουε λοιπὸν τί τέλος τραγωιδίας·
 μίμησις ἡθῶν, πράξεων, παθημάτων,
 ἡρωικοῦ τρόπου τε τῆς τραγωιδίας,
 σεμνοπρεπῆς λέξις τε καὶ διηρμένη.

pedagogic purpose of Lane Cooper's recent *Aristotelian Theory of Comedy* results in much valuable material, but in the main its use of the *Tractatus* simply continues the Byzantine methods of the work on which it relies.

The traces in classical antiquity of direct influence from the *Poetics* are slight and problematical. But there can be little doubt, judging from the words of the ancient authors themselves, that the Greeks found the definitions of *On Poets* most satisfactory, for they used practically nothing else.¹

II

What definitions did the Romans find sufficient to express their ideas of tragedy and comedy?

There is an even greater unanimity in Latin literature than in Greek as to the nature of tragedy and comedy. With the exception of the late compilations of *Tzetzes* and of the *Tractatus Coislinianus* there are no treatises in Greek devoted to the drama which even appear to have derived the distinctive *κάθαρσις* clause immediately from the *Poetics*. There are none at all in Latin literature. On the other hand, the sources which justify us in believing that the stock formulas of Greek and Latin literature were ultimately to be found in Aristotle's dialogue *On Poets* are preserved for us by Roman scholars. Nor is there any hint that the essence of drama lies in a conflict of wills; such a theory, so popular in recent times,² is almost as remote from ancient thought as the modern interpretations of the *κάθαρσις* clause itself.

¹ The citation of Greek and Roman authors does not, of course, mean that the ancient definitions of tragedy and comedy were in every instance immediately derived from a first-hand knowledge of the dialogue, *On Poets*; it means only that directly or indirectly such authors were influenced by the definitions originally found there. The problem of how long the dialogues survived is still another question.

² Cf. Brunetière's theory, similar to Hegel's, in *The Law of the Drama*, With an Introduction by Henry Arthur Jones. (*Papers on Play-making*, III, Dramatic Museum of Columbia University, New York, 1914), pp. 79-80: "The general law of the theater is defined by the action of a will conscious of itself; and the dramatic species are distinguished by the nature of the obstacles encountered by this will. And the quality of will measures and determines, in its turn, the dramatic value of each work in its species."

PLAUTUS

The dramatic species as well as the theory pertaining to them were borrowed from the Greeks by the Romans. The Roman grammarians were not alone in assimilating the Greek theories; the great writers of comedy also drew upon Greek theory to justify their own practices.

Plautus in celebrated passages of the *Amphitruo* presents his apology for his work as a tragi-comedy, because characters proper to a tragedy were introduced in the play,¹ and again he defends the appearance of Jupiter on the stage.² Such remarks were addressed to a public which would distinguish between the species on the familiar grounds derived from Peripatetics and preserved to us by Donatus and Diomedes among the Roman grammarians.

TERENCE

Terence not only brought over Greek themes and presented them to Latin audiences; he brought over the idea of comedy as representing βιωτικῶς. A phrase ascribed to Cicero by Donatus is similar to the

¹ W. M. Lindsay, *T. Macci Plauti Comoediae* (2 vols., Oxford, 1903), *Amphitruo*, 58 ff.:

teneo quid animi uostri super hac re siet:
faciam ut commixta sit; <sit> tragico [co] moedia;
nam me perpetuo facere ut sit comoedia,
reges quo ueniant et di, non par arbitror.
quid igitur? quoniam hic seruos quoque partis habet,
faciam sit, proinde ut dixi, tragico[co]moedia.

² *Ibid.*, ll. 88 ff.;

ipse hanc acturust Iuppiter comoediam.
quid? admiratin estis? quasi uero nouom
nunc proferatur Iouem facere histrioniam;
etiam, histriones anno quom in proscaenio hic
Iouem inuocarunt, uenit, auxilio is fuit.
praeterea certo prodit in tragoedia.
hanc fabulam, inquam, hic Iuppiter hodie ipse aget
et ego una cum illo. nunc <uos> animum aduortite,
dum huius argumentum eloquar comoediae.

idea given in the *Adelphoe*,¹ and it is not unlikely that Menander, receiving the formula from Theophrastus, passed it on also to Terence. The moral justification of comedy here briefly indicated became an essential part of dramatic theory in the Renaissance, and it was vigorously used to entrench comedy against the Puritans.²

VARRO

The great erudition of Varro included a work on Plautus,³ and for his vast grammatical learning he seems to have depended on Dionysius Thrax, who was in Rhodes, when Varro's master, Stilo Praeconinus, was there.⁴ Tyrannion, a pupil of Dionysius, who taught at Rome in the time of Pompey the Great, and aided in the editing of manuscripts of Aristotle and Theophrastus,⁵ was also followed by Varro.⁶ There is no evidence that the *Poetics* was among the manuscripts brought to Rome to rejuvenate the Peripatetic school, and no trace of its direct influence can be established in Latin literature. But Varro wrote of poetry and poets,⁷ and the Peripatetic foundations are apparent in

¹ Sidney G. Ashmore, *P. Terenti Afri Comoediae. The Comedies of Terence* (New York, 1908), p. 264. *Adelphoe*, III, iii, 60 (414):

denique
inspicere tamquam in speculum in uitas omnium
iubes atque ex aliis sumere exemplum sibi.

Ibid., II, 74 (428):

postremo tamquam in speculum patinas, Demea,
inspicere iubeo et moneo quid facto usus sit.

² Ashmore, *op. cit.*, p. 6, in our day feels called upon to defend Terence and Plautus against the charge of immorality, as did scholars in the seventeenth century. He asserts: "To be sure, there are plays of Plautus extant which remind us that the limits of true decency were occasionally transgressed; but even these plays, though often coarse in tone, fall short of any radical departure from the moral tenets of the age which gave them birth."

³ The *Fabulae Varronianae*, consisting of the plays which he recognized, determined the canon of those which now survive. Cf. G. Goetz and F. Schoell, *M. Terenti Varronis de Lingua Latina quae Supersunt* (Leipzig, 1910).

⁴ Sandys, *op. cit.*, I, p. 176.

⁵ Otto Jahn and Reifferscheid have stressed the dependence of Varro on Theophrastus. Cf. H. Reich, *Der Mimus* (Berlin, 1903), p. 272, note.

⁶ Sandys, *op. cit.*, p. 140.

⁷ M. Schanz, *Geschichte der römischen Litt.*, VIII. I. 2 (1909), p. 433.

what we possess of his theory.¹ This situation becomes important when it is remembered that Varro and Suetonius were the chief sources of the later theorists in poetics.²

A derivation of tragedy is ascribed to Varro by Diomedes in the same passage in which the well-known definitions occur.³ Another passage in Diomedes on the Roman varieties of comedy seems to be derived from Varro.⁴

CICERO

When discussing the dialogues of Aristotle in my previous article in the present *Studies*, I have shown how important is the evidence of Cicero for the character of those compositions,⁵ and besides the dialogues Cicero does not seem to have read much else of Aristotle, except the *Rhetoric*.⁶ At the beginning of the *Topics* he complains that no philosopher in Rome had been able to read the treatises of Aristotle, but his dialogues were in every hand.⁷ Cicero defined comedy, according to Donatus;⁸ *comoediam esse Cicero ait imitationem uitae, speculum consuetudinis, imaginem ueritatis*,⁹ not unlike Terence, as shown above.

¹ H. Funaioli, *Grammaticae Romanae Fragmenta* (Leipzig, 1907), pp. 209 ff.

² Cf. Kettner, *Kritische Bemerkungen zu Varro und Lateinischen Glossaren* (Halle, 1868), and *Varronische Studien* (Halle, 1865). In the latter it is shown that Isidore's citations of Varro were probably through intermediate sources. Cf. also, E. Samter, *Quaestiones Varronianae* (Diss., Berlin, 1891); on page 87 there is a stemma to show the relations of Varro to the great grammarians, but in the light of what is shown in this article, several additional lines should be drawn in it.

³ Funaioli, *op. cit.*, p. 320.

⁴ *Ibid.*, p. 322.

⁵ *Harvard Studies in Classical Philology*, XXVIII (1917), pp. 37 ff.

⁶ J. L. Stocks, *Aristotelianism* (New York, 1927), p. 122, erroneously asserts: "There is little evidence that the Romans seriously studied any works of Aristotle, apart from the published dialogues, except the *Rhetoric* and the *Poetics*."

⁷ Cf. W. W. Jaeger, *Studien zur Entstehungsgeschichte der Metaphysik des Aristoteles* (Berlin, 1912), pp. 147-148.

⁸ Kaibel, *CGF*, p. 67.

⁹ This definition has been identified as a fragment of the *De Re Publica*. Cf. F. Osannus, *M. Tullii Ciceronis De Republica Librorum Fragmenta* (Göttingen, 1847), and his edition of the *De Republica*, p. 329. Cf. Reich, *op. cit.*, p. 265; Cicero, *De Re Publica*, *De Legibus*, with an English translation by C. W. Keyes, Loeb Classical Library (New York, 1928), pp. 238-241; (*De Rep.*, IX, X, 11): "Numquam comoediae, nisi consuetudo vitae patuerit, probare sua theatri flagitia potuissent." Cf. Wilamowitz, *Euripides Herakles*, p. 55, for the Greek equivalent: *μίμησις βίου, κάτοπρον ὁμιλίας, ὁμοίωμα ἀληθείας*.

His works display Peripatetic ideas but no influence from the *Poetics*.¹ St. Augustine cites phrases similar to those preserved by Donatus as found in Cicero.² The idea is repeated in Cicero's oration *Pro Sexto Roscio*.³ The public speaker's interest in the diction of drama finds frequent expression in Cicero.⁴

HORACE

Of Horace's *Art of Poetry*,⁵ Saintsbury⁶ justly spoke as a "famous document — the traditional and influential importance of which cannot possibly be exaggerated, though its intrinsic critical value may be much more disputable." Horace accounts for the etymology of the word tragedy and the historical origin of the species.⁷ Because of Horace's pedagogic method and probable intention he was, however,

¹ Cf. R. Wurzer, *De Cicerone Tragoediae Iudice* (Vienna, 1885).

² B. Dombart, *Sancti Aurelii Augustini Episcopi De Civitate Dei, Libri XXII* (2 vols., Leipzig, 1908), II, 9 (pp. 62-63): "Quid autem hinc senserint Romani veteres, Cicero testatur in libris, quos de re publica scripsit, ubi Scipio disputans ait: 'Numquam comoediae, nisi consuetudo vitae pateretur, probare sua theatri flagitia potuissent.'"

³ C. F. W. Müller, *Ciceronis Scripta Omnia*, Pars II, I (Leipzig, 1880), p. 46: "et certe ad rem nihil intersit, utrum hanc ego comicum adulescentem an aliquem ex agro Veiente nominem. Etenim hanc conficta arbitror esse a poetis, ut effectos nostros more in alienis personis expressamque imaginem (nostram) vitae cotidianae videremus."

⁴ Cf. R. Klotz, *M. Tullii Ciceronis Scripta quae Manserunt Omnia*, Pars I, Vol. II (Leipzig, 1852). *Orator*, I, 28, 128 (p. 27), and III, 8, 30 (p. 151); *Brutus*, 55, 203 (pp. 243-244), and elsewhere. Also, *De Natura Deorum*, XXIX, pp. 71-72.

⁵ Cf. Norden, "Die Composition und Litteraturgattung der Horazischen Epistula ad Pisones," *Hermes*, XL (1905), pp. 481-528, where it is shown that the sequence of topics and their treatment are dependent on Greek precedents. Wilhelm Kroll, "Die Historische Stellung von Horazens Ars Poetica," *Sokrates*, LXXII; N. F. VI (1918), p. 81.

⁶ Saintsbury, *Loci Critici*, p. 54. A modern work, similar in scope to Batteux's *Les Quatre Poétiques* (1771), is Albert S. Cook, *The Art of Poetry* (Boston, 1892), containing the treatises of Horace, Vida, and Boileau.

⁷ *Ars Poetica*, l. 220. This passage is cited by Diomedes in the same passage in which Varro is mentioned and the formula of Theophrastus occurs. Cf. Keil, *Gram. Lat.*, I, p. 487. Note the translation of this passage in Horace by Goldsmith, in Cook, *op. cit.*, p. 238.

read chiefly as a technical manual for poets,¹ developing more conspicuously the aim of Aristotle's *Poetics* in this respect.²

VITRUVIUS

While Vitruvius did not have an influence on the Middle Ages,³ his description of the stage-settings proper to tragedy and comedy responds to the traditional ideas of those dramatic species, and his few words had a considerable effect on the ideas of Renaissance scholars and architects.⁴

MANILIUS

Even the astronomical poem of Manilius,⁵ reflects the traditional conception in his reference to the contrast between the intrigues and humorous characters of comedy, on the one hand, and the royal subjects and great disasters, on the other.

OVID

Ovid in the *Tristia* refers to the style of tragedy⁶ and in the *Amores* describes tragedy in a way that may have influenced Milton's *Il Penseroso*.⁷

¹ *Ars Poetica*, ll. 89 ff., 220 ff., 275 ff., are the passages which record Horace's acceptance of the traditional characteristics of the dramatic species. There is nothing of tragic purgation or purification; no apparent relation to the *Poetics*.

² The utilitarian and pedagogic purpose of *Ars Poetica* is indicated by the fact that it could inspire such a work as this: William King, *The Art of Cookery, in Imitation of Horace's Art of Poetry* (London, 1709?).

³ Vitruvius, *The Ten Books on Architecture*, translated by Morris Hicky Morgan (Cambridge, 1914), p. 150.

⁴ *M. Vitruvii Pollionis De Architectura Libri Decem* (Venice, 1567), V, viii (p. 193): "Genera autem sunt scenarum tria, unum, quod dicitur tragicum, alterum comicum, tertium satyricum. Horum autem ornatus sunt inter se dissimiles disparique ratione; quod tragice deformantur columnis, fastigiis & signis reliquisque regalibus rebus. Comicae autem aedificiorum privatorum et moenianorum habent speciem, prospectusque fenestris dispositis imitatione communium aedificiorum rationibus. Satyricae vero ornantur arboribus, speluncis, montibus, reliquisque agrestibus rebus in topiarij operis speciem deformatis."

⁵ T. Breiter, *M. Manilii Astronomica, I. Carmina* (Leipzig, 1907), V, ll. 472 ff. (p. 139).

⁶ *Tristia* II, l. 381.

⁷ *Amores*, III, 2, 13. Cf. R. C. Browne and H. Bradley, *The English Poems of John Milton* (Oxford, 1906), I, p. 276. (*Il Penseroso*, ll. 97 ff.)

SENECA

The influence of Seneca on Humanist and Elizabethan drama is well recognized. Several critics have also noted the correspondence between the contents of his tragedies and the preferred themes mentioned by the Roman grammarians.¹ It is probable, however, that the composition of the dramas was influenced by the definitions preserved by the grammarians rather than vice-versa. There seems to be present in the minds of numerous writers on Greek drama the seldom formulated and obviously unfounded idea that the Greek tragedies were composed with the principles of the *Poetics* in view. As a matter of fact, late Greek and Roman comedy was itself influenced, as we have seen, by the definitions of the dialogue *On Poets*, but we have no surviving Greek plays from the later period which show traces of the doctrines or language peculiar to the *Poetics*.

QUINTILIAN

Quintilian² has a good deal to say of the utility to the orator³ of a study of the dramatic poets. Numerous passages display his acceptance of the traditional formulas. He offers no innovations, and he does not show any direct influence of the *Poetics*. He draws the distinction, popular with theorists of rhetoric, between the *fabula* of tragedy and the *argumentum* of comedy.⁴ He continues, impressively, the contrast between *ἥθος* and *πάθος*.⁵ He refers very approvingly to Menander, and his reference obviously implies the traditional estimate of that poet and of comedy in general.⁶ Quintilian in discussing the laughter of

¹ Cf. F. L. Lucas, *Seneca and Elizabethan Tragedy* (Cambridge, 1922). Much of the material used by St. Jerome against Jovinian is believed to derive from a treatise *De Matrimonio* by Seneca. The reference by St. Jerome to the contents of tragedy, as well as other passages, is accepted by the editor of the Teubner Seneca. Cf. Fr. Haase, *L. Annaei Senecae, Opera quae Supersunt, Supplementum* (Leipzig, 1902), p. 29, fragment 67.

² L. Radermacher, *M. Fabii Quintiliani Institutionis Oratoriae Lib. XII* (Leipzig, 1907).

³ *Ibid.*, I, 8, 7 and 8, 8.

⁴ *Ibid.*, II, 4, 2.

⁵ *Ibid.*, VI, 2, 8 ff.

⁶ *Ibid.*, X, i, 69: "Hunc et admiratus maxime est, ut saepe testatur, et secutus quanquam in opere diverso Menander: qui vel unus, meo quidem iudicio, diligenter

comedy does not become strangely dogmatic and arbitrary like some modern psychologists and critics, but acknowledges the psychological difficulty without declaring it solved.¹

PLINY

Pliny the younger has a humorous reference to the garb of the actors in one of his letters, where he calls one of his villas comedy and the other tragedy.²

SUETONIUS

Suetonius, the leading immediate source for most of the later grammarians, is important as an inheritor of the learning of Varro. Parallels to his statements are to be found in Dionysius Thrax and he survives in the treatises of the grammarians.³ He is one of the sources mentioned by Isidore.⁴ Because Diomedes, Euanthius, and Donatus are our sources for his definition of comedy,⁵ of tragedy,⁶ and his statement of the differences between comedy and tragedy,⁷ these texts will be discussed below.

SERVIUS

Servius, discussing Book IV of the *Aeneid*, stresses its comic character, as judged by the current formulas of what constituted comedy

lectus, ad cuncta, quae praecipimus, effingenda sufficiat: ita omnem vitae imaginem expressit; tanta in eo inveniendi copia et eloquendi facultas; ita est omnibus rebus, personis, affectibus accomodatus."

¹ VI, 3, p. 7: "Neque enim ab ullo satis explicari puto, licet multi temptaverint, unde risus, qui non solum facto aliquo dictove, sed interdum quodam corporis tactu, lacessitur." Cf. J. Y. T. Greig, *The Psychology of Laughter and Comedy* (London, 1923), Appendix, pp. 225 ff., "Theories of Laughter and Comedy, A Historical Summary."

² R. C. Kukula, *C. Plini Caecili Secundi Epistularum Libri Novem* (Leipzig, 1912), p. 240 (Lib. IX, Epist. vii.)

³ A. Reifferscheid, *C. Suetoni Tranquilli Praeter Caesarum Libros Reliquiae* (Leipzig, 1860), p. 5.

⁴ M. Manitius, *Geschichte der Lateinischen Literatur des Mittelalters* (Munich, 1911), I, pp. 55-57. Cf. e.g. Isidore, *Orig.*, VIII, 7, 5.

⁵ Reifferscheid, *op. cit.*, p. 7.

⁶ Reifferscheid, *op. cit.*, p. 5.

⁷ *Ibid.*, p. 8.

and tragedy,¹ for which he has been duly condemned by modern scholars just as they have criticized Dante and Chaucer for participating in the same tradition. Saintsbury's comment² is intended to be devastating; "So the Fourth book, with its steady rise toward the hopeless, the helpless, the inevitable end, is *paene comicus*. Certainly the criticism is, from our point of view." This failure to understand the difference between all ancient definitions of comedy and tragedy and nineteenth-century formulas is repeated even by Collins.³

DONATUS

The treatment of comedy and tragedy by Donatus was for later ages most important and influential. His sources seem to have been the same as those of Diomedes and Charisius.⁴

Donatus defines comedy,⁵ introducing the same Greek equivalents

¹ G. Thilo and H. Hagen, *Servii Grammatici in Vergilii Carmina Commentarii* (Leipzig, 1881), I, p. 459, on *Aen.* IV: "Apollonius Argonautica scripsit et in tertio inducit amantem Medeam: inde totus hic liber translatus est. est autem paene totus in affectione, licet in fine pathos habeat, ubi abscessus Aeneae gignit dolorem. sane totus in consiliis et subtilitatibus est; nam paene comicus stilus est: nec mirum, ubi de amore tractatur."

² G. Saintsbury, *History of Criticism and Literary Taste in Europe* (3 vols., Edinburgh and London, 1900-04), I, p. 339.

³ S. T. Collins, *The Interpretation of Virgil with Special Reference to Macrobius* (Oxford, 1909), pp. 8-9.

⁴ Keil, *Grammatici Latini*, IV (Leipzig, 1854), p. xl: "cum Diomede ita per universum librum consentit Donatus, ut multis locis . . . non solum eadem res tradantur, sed etiam verba verbis respondeant . . . ab antiquiore auctore, tamquam communi fonte, uterque suam doctrinam derivaverit . . . non solum cum Diomede, sed etiam cum Charisio ita consentiunt, ut haec omnia ex eodem fonte ducta esse plane adpareat." Cf. Reifferscheid, *Suetonius*, pp. 379-380.

⁵ Kaibel, *CGF*, p. 67: "Comoedia est fabula diuersa instituta continens affectuum ciuiliū ac privatorum, quibus discitur quid sit in uita utile, quid contra euitandum. hanc Graeci sic definiuerunt: κωμῳδία ἐστὶν <ἰδιωτικῶν> πραγμάτων περιοχὴ ἀκίνδυνος. comoediam esse Cicero ait imitationem uitae, speculum consuetudinis, imaginem ueritatis. comoediae autem a more antiquo dictae, quia in uicis huiusmodi carmina initio agebantur apud Graecos (ut in Italia compitaliciis ludicris), admixto pronuntiationis modulo, quo dum actus commutantur populus attinebatur: ἀπὸ τῆς κώμης, hoc est ab actu uitae hominum qui in uicis habitant ob mediocritatem fortunarum, non in aulis regiis, ut sunt personae tragicae. comoedia autem, quia

which Diomedes ascribes to Theophrastus, as we noted near the beginning of this article. He then quotes Cicero, and develops the latter's phrases in a way which shows their substantial agreement with Theophrastus,¹ and his conception of the dramatic species is implied in his commentary on Terence.² The vast influence of the ideas of Donatus can hardly be over-estimated; his presence is to be seen in the Middle Ages frequently,³ and his discussion was reprinted in most editions of Terence from the Renaissance until a comparatively recent date. His grammar, as is well known, was so popular for ages that his name became synonymous with an elementary grammar.⁴

ST. JEROME

St. Jerome, the pupil of Donatus and the secretary of Pope Damasus, had been a diligent student of Terence,⁵ and, as one might expect, he

poema sub imitatione uitae atque morum similitudine compositum est, in gestu et pronuntiatione consistit . . . atque esse comoediam cotidianaе uitae speculum, nec inuria; nam ut intenti speculo ueritatis liniamenta facile per imaginem colligimus; ita lectione comoediae imitationem uitae consuetudinisque non agerrime animaduertimus."

¹ If what is valuable in the commentary of Servius is really derived from Donatus, the judgment on *Aen.* IV, mentioned above is all the more easily understood. Cf. E. K. Rand, "Is Donatus' Commentary on Virgil Lost?" *Classical Quarterly*, X (1916), p. 158.

² Cf. H. T. Karsten, *Commenti Donatiani ad Terenti Fabulas* (Lugduni Bavorum, 1912-13); P. Wessner, *Aeli Donati quod Fertur Commentum Terenti*, II (Leipzig, 1905), pp. 90 and 92, on *Adelphoe*, III, 3, ll. 61 and 75; Paul Rabbow, *De Donati Commento in Terentium* (Leipzig, 1897).

³ Dante's estimate of Donatus is to be seen in the fact that he placed him with St. Bonaventura among the Doctors of the Church, and refers to him in Par. XII, ll. 137-138, as:

"quel Donato
Ch'alla prim' arte degno por mano."

⁴ W. J. Chase, *The Ars Minor of Donatus*, Madison, Wis., 1926.

⁵ *Apologia adversus Libros Rufini* (Migne, *Patrol. Lat.*, XXIII, cols. 428-429): "puto quod puer legeris . . . commentarios . . . in Terentii Comoedias praeceptoris mei Donati, aequae in Vergilium." *Eusebii Chronicorum Lib. II. Interprete S. Hieronymo*. (Migne, *Patrol. Lat.*, XXVII, cols. 501-502). A.D. 359: "Victorinus rhetor et Donatus grammaticus praeceptor meus Romae insignes habentur."

expresses again the traditional definition of comedy.¹ And he cites tragedy in his controversy with Jovinian to prove the wickedness of womankind.²

EUANTHIUS

For Euanthius we have the evidence of St. Jerome. It is probable that the first part of the treatise by Donatus belongs to Euanthius,³ a passage which appears to have come from Suetonius. It is interesting to compare what he has to say about the origin of tragedy and comedy⁴ with what is said in the *Poetics*.⁵ The accounts are entirely different, and if evidence were needed, this would again show that the *Poetics* had little to do with establishing the tradition. The distinctions he draws between tragedy and comedy are consistent with those of the scholiasts and other inheritors of the Peripatetic tradition.⁶

¹ *Sancti Hieronymi Epistula LIV, Ad Furiam de Viduitate Servanda*. Corpus Script. Eccles. Lat., LIV (Vienna and Leipzig, 1910), p. 476: "cum etiam comicus cuius finis est humanos mores nosse atque describere dixerit, sine Cerere et Libero, friget Venus" (*Eunuchus*, III, v. 6). St. Jerome's words were often cited by educational authorities as a justification for including Latin comedy in the curricula of boys' schools.

² *S. Eusebii Hieronymi Adversus Jovinianum*, Lib. I (Migne, *Patrol. Lat.*, XXIII, col. 292): "Quidquid tragoediae tument, et domos, urbes, regnaque subvertit, uxorū pellicumque contentio est. Armantur parentum in liberos manus; nefandae apponuntur epulae; et propter unius mulierculae raptum, Europa atque Asia decennali bello confligunt."

³ A. Reifferscheid, *Euanthi et Donati Commentum de Comoedia*, Prog. (In *Index Scholarum in Universitate Litterarum Uratislaviense*, 1874). Ed. Scheidmantel, *Quaestiones Euanthianae* (Diss., Leipzig, 1883). P. Wessner, *Untersuchungen zur Lateinischen Scholien-Litteratur*, (Bremerhaven, 1899).

⁴ Wessner, *Aeli Donati quod Fertur*, I (1902), p. 14, l. 15: "quamuis igitur retro prisca uoluentibus reperiatur Thespīs tragoediae primus inuentor et comoediae ueteris pater Eupolis cum Cratino Aristophanes esse credatur, Homerus tamen, qui fere omnis poeticae largissimus fons est, etiam his carminibus exempla praebeuit et uelut quandam suorum operum legem praescrispsit: qui Iliadem ad instar tragoediae, Odysiam ad imaginem comoediae fecisse monstratur."

⁵ *Poetics*, 1448 a 3 and 1449 a 10.

⁶ Wessner, *op. cit.*, p. 21: "inter tragoediam autem et comoediam cum multum imprimis hoc distat, quod in comoedia mediocres fortunae hominum, parui impetus periculorum laetique sunt exitus actionum, at in tragoedia omnia contra, ingentes personae, magni timores, exitus funesti habentur; et illic prima turbulenta,

DIOMEDES

The grammarian Diomedes, also of the fourth century, is one of the most elaborate writers on the dramatic species; his influence, combined with that of Donatus, determined what most men held to be the meaning of tragedy and comedy for fourteen centuries. There has been some controversy over his sources,¹ and in particular his relation to Varro through Suetonius has been debated,² but the embodiment of the tradition in an authoritative form is our present concern. His quotation of the Greek formulas, and his ascription of that for tragedy to Theophrastus,³ makes it almost certain that the definitions of the

tranquilla ultima, in tragoedia contrario ordine res aguntur; tum quod in tragoedia fugienda uita, in comoedia capessenda exprimitur; postremo quod omnis comoedia de fictis est argumentis, tragoedia saepe de historia fide petitur."

¹ Cf. E. Koett, *De Diomedis Artis Poeticae Fontibus* (Diss., Jena, 1904); Buchholz, "Ueber die Abhandlung De Poematibus des Diomedes," *N. Jahrbuch*, XXIII (1897), pp. 127 ff.

² Cf. Keil, *Grammatici Latini*, I, p. liv: "In tertio libro Diomedis memorabilis et plena antiquae eruditionis disputatio est de poematibus 482,13-492,14. eam totam a Suetonio, quem in fine eius capituli 491,30 Diomedis appellavit, petitam esse docuit O. Iahnus. Mus. Rhenan. noviss. VIII, p. 629. nam quod satirici poetae tres tantum appellati essent 485, 32, Lucilius Horatius Persius omisso nomine Iuvenalis, id non posse intellegi, nisi ab antiquiore aliquo auctore, qui aetate superior fuisset quam Iuvenalis, haec recepta essent. deinde quia Suetonium in libris suis maxime Varronis auctoritate usum esse constaret, ea quoque quae Varronis nomine Diomedes adscripsisset 486, 8. 487, 15. 488, 1. 489, 18 Suetonio deberi. ea vero quae de origine bucolici carminis 486, 17 sqq. tradita essent, quoniam cum iis fere consentirent quae de eadem re Probus ante commentarium in Vergilii bucolica scripsisset, ex eo ipso loco a Suetonio, qui saepius Probi copiis usus esset, recepta videri. quem autem Suetonii librum Diomedes exscripserit non magis certo definiri potest, quam quo potissimum ex Varronis libris Suetonius usus sit . . . ceterum ut ipse Diomedes vix quicquam antiquo commentario addidit, ita Suetonius in plerisque satis accurate Varronis auctoritatem secutus esse videtur." But Wessner does not agree with this conclusion (*Hermes*, LII, 1917, p. 211): " . . . wobei ich nicht unterlassen will darauf hinzuweisen, dass die Ansicht Reifferscheids die ganze Poetik bei Diomedes gehöre dem Sueton, nach den Darlegungen von Buchholz und besonders von Kött unhaltbar ist."

³ Keil, *op. cit.*, pp. 487 ff.: "Tragoedia est heroicae fortunae in adversis comprehensio. a Theophrasto ita definita est, τραγωδία ἐστὶν ἡρωϊκῆς τύχης περιστάσις. tragoedia, ut quidam, a τράγωε et φῶγη dicta est, quoniam olim actoribus tragicis τράγος, id est hircus, praemium cantus proponebatur, qui Liberalibus die festo

other species came ultimately from the same source. The definition of tragedy stands between two passages which are directly attributed to Varro, so that the genealogy of this definition is: Aristotle-Theophrastus-Varro-Suetonius — an unknown number of grammarians and compilers — Diomedes.

The definition of comedy¹ is parallel to that of tragedy and involves pointing out the differences between the two.

Thus in Roman, as in Greek antiquity, there was a consistent reliance on the definitions of tragedy and comedy received at the beginning from *On Poets*. There is plenty of evidence showing the persistence of Peripatetic ideas in Roman literary theory, but this evidence does not include any indubitable influence from the *Poetics*. The formulas which were to be passed on to the Middle Ages were those from the dialogue written by Aristotle.

Libero patri ob hoc ipsum immolabatur, quia, ut Varro ait, depascunt vitem; et Horatius in arte poetica

carmine qui tragico vilem certavit ob hircum,
mox etiam agrestis Satyros nudavit,

et Virgilius in georgicon secundo, cum et sacri genus monstrat et causam talis hostiae reddit his versibus,

non aliam ob culpam Baccho caper omnibus aris
caeditur.

alii autem putant a faece, quam Graecorum quidam *τρύγα* appellant, tragoediam nominatam, per mutationem litterarum *v* in *a* versa, quoniam olim nondum personis a Thespide repertis, tales fabulas peruncti ora faecibus agitabant, ut rursum est Horatius testis sic,

ignotum tragicae genus invenisse Camenae
dicitur et plaustis vexisse poemata Thespi,
quae canerent agerentque infecti faecibus ora.

alii a vino arbitrantur, propterea quod olim *τρύξ* dictitabatur, a quo *τρύγητος* hodieque vindemia est, quia Liberalibus apud Atticos, die festo Liberi patris, vinum cantoribus pro corollario dabatur, cuius rei testis est Lucilius in duodecimo."

¹ *Ibid.*, p. 488: "Comoedia est privatae civilisque fortunae sine periculo vitae comprehensio, apud Graecos ita definita, *κωμῳδία ἐστὶν ἰδιωτικῶν πραγμάτων ἀκίνδυνος περιοχὴ*. comoedia dicta ἀπὸ τῶν κωμῶν. *κῶμαι* enim appellantur pagi, id est conventicula rusticorum. itaque iuventus Attica, ut ait Varro, circum vicos ire solita fuerat et quaestus sui causa hoc genus carminis pronuntiabat. aut certe a ludis vicinalibus. nam postea quam ex agris Athenas con migratum est et hi ludi instituti

III

What definitions did the Middle Ages, in general, accept as expressing proper ideas of tragedy and comedy?

BOETHIUS

It is not necessary for the present purpose to state a principle for separating the late classical period from the early mediaeval. Many of the characteristic tendencies of the Middle Ages are already well developed before the political events occur which are usually accepted as dividing these eras.¹

Boethius, however, is in many ways particularly significant for the Middle Ages, and began one of its principal theoretical activities, the harmonizing of Aristotle and revealed religion.² Hugo of Trimberg called Boethius *dignus et laudabilis in omni natione*,³ and a more modern editor has said of him: "No philosopher was so bone of the bone and

sunt, sicut Romae conpitalicii, ad canendum prodibant, et ab urbana κῶμη καὶ ᾠδῇ comoedia dicta est: vel quod in ea viculorum, id est humilium domuum, fortunae comprehendantur, non ut in tragoedia publicarum regiarumque: vel ἀπὸ τοῦ κῶμου, id est comessatione, quia olim in eius modi fabulis amantium iuvenum κῶμοι cane-bantur. comoedia a tragoedia differt, quod in tragoedia introducuntur heroes duces reges, in comoedia humiles atque privatae *personae*; in illa luctus exilia caedes, in hac amores, virginum raptus: deinde quod in illa frequenter et paene semper laetis rebus exitus tristes et liberorum fortunarumque priorum in peius adgnitio. quare varia definitione discretæ sunt. altera enim ἀκλινδυνος περιοχὴ, altera τύχης περι-στασις dicta est. tristitia namque tragoediae proprium; ideoque Euripides petente Archelao rege ut de se tragoediam scriberet abnuît ac precatus est ne accideret Archelao aliquid tragoediae *proprium*, ostendens nihil aliud esse tragoediam quam miseriarum comprehensionem."

¹ While Donatus and Diomedes embodied the Peripatetic conception as it was handed on to the Middle Ages, it hardly seems accurate, however, to follow the practice of what is, on the whole, a useful book: Barrett H. Clark, *European Theories of the Drama* (New York, 1918). In the chapter on "Dramatic Criticism of the Middle Ages," two authorities are reproduced: Donatus, *On Comedy and Tragedy*, and Dante's *Epistle to Can Grande* (pp. 41-47).

² Cf. A. Hildebrand, *Boethius und seine Stellung zum Christentume* (Regensburg, 1885), p. 5 ff.

³ J. Huemer, "Das Registrum multorum auctorum des Hugo von Trimberg," *Sitzungsber. d. Wiener Akad. d. Wiss. Philos.-Hist. Cl.*, CXVI (1888), pp. 145-190.

flesh of the flesh of Middle-Age writers as Boethius. Take up what writer you will, and you find not only the sentiments, but the very words of the distinguished old Roman."¹

The same formula that Donatus and Diomedes had inherited through the ages is repeated by Boethius or implied in several places. In the *Consolatio Philosophiae*,² he asks: *Quid tragoediarum clamor aliud deflet nisi indiscreto ictu fortunam felicia regna uertentem?* This Chaucer translated as "What other thing biwailen the cryinges of tragedies but only the dedes of Fortune, that with an unwar stroke overtorneth realmes of grete nobley?"³ Cloetta observes that; "If in these words nothing wrong is contained, yet they helped to establish the Middle Ages in error, as is proved to be the case with Chaucer."⁴ This remark, and the adoption of his views by most historians of the drama,⁵ proceeds from two prior misconceptions. One is his idea of the nature of tragedy and comedy based on German philosophy of the early nineteenth century, and the other is his scholarly purpose, which is to determine how much the Middle Ages knew of classical drama and how successful they were in imitating it, rather than to discover what license the Middle Ages had for their theory of tragedy and comedy.

Boethius, as did Cicero and many others, used tragedy in a meta-

¹ Chaucer's Translation of Boethius' "De Consolatione," edited by Richard Morris (London, 1868), p. ii.

² R. Peiper, *Anicii Manlii Severini Boetii Philosophiae Consolationis Libri Quinque* (Leipzig, 1871), pp. 28, l. 36.

³ W. W. Skeat, *The Student's Chaucer* (New York, n. d.), p. 143. Cf. Bernard L. Jefferson, *Chaucer and the Consolation of Philosophy of Boethius* (Diss., Princeton, 1917).

⁴ W. Cloetta, *Beiträge zur Litteraturgeschichte des Mittelalters und der Renaissance* (Halle, 1890-92), I, p. 17.

⁵ W. Creizenach, *Geschichte des Neueren Dramas* (Halle, 1893), I, p. 9: "Unter diesen Umständen konnte es um so leichter geschehen, dass allmählich in den Lehrbüchern des Mittelalters in Bezug auf die Grundbegriffe des Dramas eine unglaubliche Verwirrung um sich griff." But cf. Lynn Thorndike, *Science and Thought in the Fifteenth Century* (New York, 1929), pp. 9-10: "The old slurs and disparaging generalizations at the expense of the middle ages are now repeated only by mechanical creatures of habit, by those who stopped thinking and reading twenty or thirty years ago, and who refuse to give up any catchword or prejudice that was instilled into their minds in childhood."

phorical sense of suffering.¹ Their example does not prove, as Cloetta seems to think in this and other instances which he cites, that, although Boethius was acquainted with classical drama, when acquaintance with it had practically disappeared in later times, a proper theory of tragedy and comedy had also been lost.

Among the commentaries on Boethius is one formerly ascribed to St. Thomas Aquinas.² The gloss on the reference to tragedy might give some hint of a scholastic theory of tragedy if the commentary were really his. But it has been established that Aquinas did not compose this work,³ and although it was very popular and ran through many editions after the invention of printing, it merely repeats material derived from Isidore in the first place.

ISIDORE

One of the most popular and useful books of the Middle Ages was the compilation of the saintly encyclopedist Isidore of Seville, in whom the aim of originality was completely absent.⁴ He carried on the traditional definitions as best he could, although etymology at times usurped the rôle of more difficult historical description.⁵ Among the most import-

¹ Peiper, *op. cit.*, p. 205 (*Contra Etytychen et Nestorium*, l. 80): "At si noua ueraque non ex homine sumpta caro formata est, quo tanta tragoedia generationis? ubi ambitus passionis?"

² Cf. various editions in the Harvard College Library; e.g., *Boetii Viri Celeberrimi De Consolatione Philosophie Liber cum Optimo Comento Beati Thome*. [1490?]

³ Cf. P. Mandonnet, *Des Écrits Authentiques de S. Thomas d'Aquin* (2d ed., Fribourg, Switzerland, 1910).

⁴ H. Dressel, *De Isidori Originum Fontibus* (Turin, 1874). A. Schenk, *De Isid. Hisp. de Natura Rer. Libelli Fontibus* (Jena, 1909). C. H. Beeson, *Isidor-Studien* (Munich, 1913). W. M. Lindsay, *Isidori Hispalensis Episcopi Etymologiarum sive Originum Libri XX* (2 vols., Oxford, 1911). Lindemann, *Corp. Gramm. Vet. Lat.*, III (1833).

⁵ His ideas about the etymology of tragedy may have been disturbed by his literary disapproval of the goat. Cf. *Etym.* XII, I, 14 (Lindemann, *op. cit.*, p. 374): "Hircus lascivum animal et petulcum et fervens semper ad coitum: cuius oculi ad libidinem in transversum aspiciunt, unde et nomen traxit. Nam hirci sunt oculorum anguli secundum Suetonium: cuius natura adeo calidissima est, ut adamantem lapidem, quem nec ignis, nec ferri valet domare materia, solus huius cruor dissolvat."

tant passages is that in his Book VIII of the *Etymologies*.¹ Many of Isidore's unfavorable remarks about the stage of antiquity,² which were those most apt to be carried on by the glossators, were apparently derived from Tertullian.³

Kayser held that the common source of Diomedes and Isidore was probably Suetonius.⁴ He judged that the references to Varro came from the same source.⁵ But Wessner contested this conclusion.⁶ At any rate, Creizenach, like other historians of the drama cites Isidore to prove that the Middle Ages did not know what tragedy or comedy was, because the mediaeval understanding of the tragic and comic did not

¹ *Etym.* VIII, vii (Lindemann, III, p. 265): "Tragoedi dicti, quod initio canentibus praemium erat hircus, quem Graeci τράγος vocant. Unde et Horatius:

Carmine qui tragico vilem certavit ob hircum.

Olim enim dehinc sequentes tragici multum honorem adepti sunt, excellentes in argumentis fabularum ad veritatis imaginem fictis. Comoedi appellati sive a loco, quia circum pagos agebant, quos Graeci κῶμας vocant, sive a comessatione. Solebant enim post cibum homines ad eos audiendos venire. Sed comoedi privatorum hominum praedicant acta, tragici vero res publicas et regum historias. Item tragicorum argumenta ex rebus sunt luctuosius: comicorum ex rebus laetis."

² Cf. *Etym.* XVIII, xlv: "Tragoedi sunt, qui antiqua gesta atque facinora sceleratorum regum luctuoso carmine spectante populo concinebant." And *Etym.* XVIII, xlvi: "Comoedi sunt, qui privatorum hominum acta dictis, aut gestu canebant, atque stupra virginum et amores meretricum in suis fabulis exprimebant" (Lindemann, *op. cit.*, pp. 577-578).

³ M. Klussman, *Excerpta Tertullianea in Isidori Hispalensis Etymologiis* (Hamburg, 1892), pp. 30-31.

⁴ J. Kayser, *De Veterum Arte Poetica Quaestiones Selectae* (Leipzig, 1906), pp. 44-45.

⁵ *Ibid.*, p. 51.

⁶ P. Wessner, "Isidor und Sueton," *Hermes*, LII (1917), p. 292: "Seine Quellen hat Isidor nur verhältnismässig selten genannt; gerade diejenigen, die er an meisten ausgebeutet hat, nennt er in der Regel nicht. Die Citate aus älteren Autoren hat er fast durchweg aus zweiter und dritter Hand, und zu ihnen gehören unter anderen auch die Suetoncitate. Es kann zum allermindesten als sehr wahrscheinlich angesehen werden, dass er keine Schrift von Sueton in Händen gehabt hat ausser vielleicht die Kaiserbiographien. Mann kann möglicherweise mit Hilfe von sicher gestelltem Eigentum Suetons bei anderen Schriftstellern hier und dort zu der Feststellung gelangen, dass die von Isidor benutzten Quellen in einzelnen Fällen irgendwie mit Sueton zusammenhängen, aber mit Hilfe Isidors suetonisches Gut anderwärts nachweisen zu wollen, ist ein eitles Beginnen und muss scheitern, wie Schmekels Buch in abschreckender Weise zeigt."

correspond to nineteenth-century philosophical principles, and the Middle Ages were largely ignorant of the dramatic poets of antiquity.¹

GLOSSES

A good deal of value has often been attached to glosses, as indicating the nature of the mediaeval conception of tragedy and comedy. The strange statements presented by such glosses are supposed to indicate that the Middle Ages were entirely mistaken and in no way possessed an adequate theory of tragedy and comedy. Several observations are pertinent on this score. It is to be noted, first of all, that the grammarians Donatus and Diomedes maintained an influence continuously; that Isidore, in particular, was persistently popular, being the chief source of both truth and error for most of the glosses; that the misinterpretations are usually due to faulty etymology or to hints derived from Tertullian;² and that the mistakes are mistakes in understanding the traditional formulas derived from *On Poets* ultimately and not misinterpretations of the *Poetics*. It is also to be noted that glosses have not yielded the gains once expected from their collection and study. The amount of independent evidence to be had from them, covering points not available in surviving classical literature, is indeed surprisingly

¹ W. Creizenach, *Geschichte des Neueren Dramas* (Halle, 1893), I, p. 9.

² Cf. A. Reifferscheid and G. Wissowa, *Quinti Septimi Florentis Tertulliani Opera*. (*Corpus Script. Eccles. Lat.*, vol. XX, Prague, Vienna, and Leipzig, 1890), *De Spectaculis*, *passim*. But Tertullian introduces a keen appreciation of tragic values when he anticipates the confusion of his enemies on the Day of Judgment. Cf. *op. cit.*, pp. 28-29: "at enim supersunt alia spectacula, ille ultimus et perpetuus iudicii dies, ille nationibus insperatus, ille derisus, cum tanta saeculi uetustas et tot eius natiuitates uno igni haurientur . . . etiam poetas non ad Rhadamanthi nec ad Minonis, sed ad inopinati Christi tribunal palpitantes? tunc magis tragoedi audiendi, magis scilicet uocales in sua propria calamitate; tunc histriones cognoscendi, solutiores multo per ignem; tunc spectandus auriga in flammea rota totus ruber; tunc xystici contemplandi, non in gymnasiis, sed in igne iaculati. . . ." An even more frequent source of misleading glosses is to be found in Lactantius, *Divin. Inst.*, VI, xx (*Corpus Script. Eccles. Lat.* XIX, p. 560 ff.): "In scenis quoque nescio an sit corruptela uitiosior. nam et comicae fabulae de stupris uirginum loquuntur aut amoribus meretricum, et quo magis sunt eloquentes qui flagitia illa finxerunt, eo magis sententiarum elegantia persuadent et facilius inhaerent audientium memoriae uersus numerosi et ornati. item tragicae historiae subjiunt oculis parricidia, et incesta regum malorum, et coturnata scelera demonstrant "

small.¹ Too many of them are the result of courageous ignorance rather than rare fragments of authentic classical origin.

The *Glossarium Ansileubi*, edited by Lindsay, illustrates several of these points.² Glosses reproduced by Kaibel go back to Isidore,³ while etymology is emphasized in the *Commentum Einsidlense in Donati Artem Minorem*.⁴ The glosses developed before the general diffusion of Isidore are the most apt to err.⁵ Interesting material of this sort is provided in the *Corpus*,⁶ and it is a comparatively easy task to trace the sources of the mingled fact and fiction in most of the glosses.⁷ On the whole, however, little positive evidence for the mediaeval theory is to

¹ Cf. W. M. Lindsay and H. J. Thomson, *Ancient Lore in Mediaeval Latin Glossaries* (St. Andrews University Publications, No. XIII, London, 1921), p. viii: "We must banish from our minds the notion that each glossary is an isolated work, the result of the learned labour of a life-time, the slowly amassed collectanea of some wide reader like Bede or Lupus. . . . Glossaries are much more hasty make-shifts, the mere result of massing the word-collections that were available at this or that monastery and then re-arranging the mass."

² *Glossaria Latina, Iussu Academiae Britannicae Editae*; vol. I, *Glossarium Ansileubi sive Librum Glossarum* (edited by W. M. Lindsay and others, Paris, 1926), p. 129, 398, *Comes(s)atio: convivium meretricum*; 423, *Comicam: tragicam, satiricam*, p. 568, 57, *tragoedia: luctuosae relationes*; 60, *luctuosum carmen*; 66, *tragoedia: est quae res publicas amplissimas et regum historias continet; tragoediam autem a Melpo[e]mene Musa assuerunt poetae inventam. . . .*

³ Kaibel, *CGF*, p. 72: "Comoedia, historia tragoedia. Comoediae, cantica agrestia graece. Comoedia est quae res privatorum et humilium personarum comprehendit non tam alto ut tragoedia stilo sed mediocri et dulci. Comoedia est quae privatorum hominum continet acta. . . . Comoedi sunt qui privatorum hominum acta dictis aut gestu canebant atque supra virginum et amores meretricum in suis fabulis exprimebant."

⁴ *Grammatici Latini ex recensione Henrici Keilii, Supplementum Continens Anecdota Helvetica, ex recensione Hermannii Hageni*. (*Gramm. Lat.*, vol. VII, Leipzig, 1870), p. 236: "Comoedia autem dicitur a Graeco, quod est 'comos' et 'ode.' Comos enim Graece uilla, ode cantus dicitur, inde comoedia carmen uillanum de uilibus et inanibus rebus compositum. Orestes tragoedia. . . . 'Tragos' Graece hircus, inde tragoedia dicta est, quia poetis talia carmina componentibus hircus dabatur pro beneficio."

⁵ A. S. Napier, *Old English Glosses (Anecdota Oxoniensia)*, vol. XI, Oxford, 1900, p. 93.

⁶ *Corpus Glossariorum Latinorum*. Cf. especially, G. Goetz, *Thesaurus Glossarum Emendatarum*, vols. VI-VII (Leipzig, 1899-1901).

⁷ J. F. Mountford, *Quotations from Classical Authors in Medieval Latin Glossaries* (New York, 1925), contains additional material

be had from the glosses.¹ Some of the inadequate ideas are to be traced to Eusebius.² The explanation in many early German³ and Anglo-Saxon⁴ glosses is also to be found in the original use of the word in its metaphorical sense.

It is difficult to distinguish between such collections of glosses and the fuller dictionaries and encyclopedias into which they grew, but the work of Papias is best treated as a lexicon. His *Elementarium Doctrinae Erudimentum* drew upon the *Liber Glossarum*,⁵ but he presents further data secured from Isidore, Diomedes, and Donatus, of whom the last is expressly mentioned.

JOHN OF SALISBURY and UGUCCIONE DA PISA

In John of Salisbury are to be found reflections of the traditional theory of tragedy and comedy.⁶ The *Magnae Derivationes* of Uguccone da Pisa will be discussed in relation to Dante, but it was based on Isidore and Papias and affected, among others, Bartholomaeus Anglicus.⁷

VINCENT OF BEAUVAIS

Vincent of Beauvais, another very popular encyclopedist, of the thirteenth century,⁸ was frequently printed, down to the seventeenth century.⁹ In that part called *Speculum Doctrinale*, chapter 109, poetry

¹ Cf. *Corpus*, IV, pp. 185, 220, 221, 425, and 572; V, pp. 181, 250, 396, and 426.

² *Corpus*, V, pp. 418 and 426. Cf. Eusebius, *Eccl. Hist.*, I, 8.

³ L. Diefenbach, *Glossarium Latino-Germanicum Mediae et Infimae Aetatis* (Frankfurt, 1857), p. 155. Diefenbach, *Novum Glossarium Latino-Germanicum Mediae et Infimae Aetatis* (Frankfurt, 1867), p. 102. E. Steinmeyer and E. Sievers, *Die Althochdeutschen Glossen* (Berlin, 1879-98).

⁴ T. Wright, *Anglo-Saxon and Old English Vocabularies* (2d ed., R. P. Wülcker, 2 vols., London, 1884), s.v. *tragoedia*; *comoedia*.

⁵ Cloetta, *op. cit.*, I, pp. 23-24.

⁶ *Polycraticus*, III, 8 and VIII, 9. (Migne, CXCIX, col. 491 A. and col. 743 B.)

⁷ P. Toynbee, *Dante Studies and Researches* (London, 1902), pp. 97 ff.

⁸ Cloetta, *op. cit.*, I, p. 33. E. Boutaric, *Vincent de Beauvais et la Connaissance de l'Antiquité Classique au Treizième Siècle* (Paris, 1875).

⁹ *Bibliotheca Mundi. Vincentii Bellovacensis speculum quadruplex; naturale, doctrinale, morale, historiale . . . Omnia nuno accurate recognita . . . opera et studio theologorum Benedictinorum collegi Vedastini in alma academia Duacensi* (Duaci, 1624).

is classified into seven kinds, where tragedy and comedy are defined, in accordance with Isidore. In the *Speculum Doctrinale*, a section, *De poetis*,¹ is carried over from Isidore, and chapter 110 is simply *Ety-mologiarum* VIII, 7 reproduced completely.

JOHANNES JANUENSIS

The *Catholicon*,² another store-house of mediaeval learning, by Johannes de Balbis or Januensis, depends on Papias, and on Diomedes or Donatus either immediately, or through such compilations as that of Uguccione, for its views of tragedy and comedy.³

PROMPTORIUM PARVULORUM

In the fifteenth-century Latin-English dictionary, the first of its kind, the *Catholicon* of Johannes Januensis is cited for tragedy and Uguccione for comedy.⁴

METAPHORICAL USE

The metaphorical use of tragedy, which depends on the traditional understanding rather than upon the special sense of the *Poetics*, is frequent from the time of Cicero down. In the Middle Ages it is often found; among others, in Ekkehard IV,⁵ Lampert of Hersfeld,⁶ and Otto of Freising.⁷

One of the works most frequently referred to, by historians of the drama and others, for data on the mediaeval conception of tragedy and

¹ *Ibid.*, I, lxiv, col. 76.

² A copy in the Library of Harvard College: *Catholicon. Edita a Fratre de Janua, Ordinis Predicatorum.* (Cologne, 1497.)

³ Cf. Cloetta, *op. cit.*, I, p. 26.

⁴ A. L. Mayhew, *The Promptorium Parvulorum, The First English-Latin Dictionary*, 1440 A.D. (E. E. T. S.), 1890, col. 240 and col. 351. Cf. note, p. 629.

⁵ G. Meyer von Kronau, *Casus Sancti Galli* (St. Gallische Geschichtsquellen, St. Gallen, 1877-79), pp. 228, 237, 238, 346, 411, and 445.

⁶ O. Holder-Egger, *Lamperti Monachi Hersfeldensis Opera* (Hanover and Leipzig, 1894), p. 172.

⁷ A. Hofmeister, *Otonis Episcopi Frisingensis Chronica sive Historia de Duabus Civitatibus* (*Script. Rer. Germ. sep. ed.*, Hanover and Leipzig, 1912), pp. 2-3, 7, 317.

comedy, as well as of the tragic and comic, is Cloetta's book. He bases his investigation on the classical conception of classical drama, as determined by modern criticism.¹ He considers only those literary productions which have some close relation to the classical drama. Within the pre-determined limitations he produced a scholarly treatise of permanent value,² but as critics pointed out at the time of its publication, the terms tragedy and comedy were not applied solely to survivals and imitations of the classic drama. Cloetta's work was expanded and in some points improved by Bahlmann.³

The compositions which Cloetta examined, although they do not always conform to his pre-determined criteria, always find justification for their being known as comedies or tragedies in the mediaeval theory as it has been outlined here. The terms were extended to many kinds of narrative, as we have already seen, and if Cloetta had attempted to analyze every one to see how far it conformed to the mediaeval rather than his particular and narrower basis, the task would have been enormous and of no more than corroborative value. The Middle Ages were not willfully eccentric but no one will deny that in the course of time a great deal of classical learning was forgotten just as certainly as much classical literature was lost. It is, therefore, sufficient for the present purpose to concede the value of Cloetta's work within its limits, but to point out that the Middle Ages inherited an authentic and legitimate conception of classical origin and that, with very elastic inclusiveness, they applied the theory they had received from classical antiquity.

¹ Cloetta, *Beiträge*, I, pp. 1-2.

² Cloetta himself in vol. II corrects his data on the knowledge of Seneca in the Middle Ages, as Traube pointed out in the *Krit. Jahresber. ii. d. Fortschr. d. Rom. Phil.* (1890), I, p. 90. Manitius has written many articles on mediaeval knowledge of the classics, including the dramatic poets.

³ P. Bahlmann, *Die Erneuerer des Antiken Dramas und ihre Ersten Dramatischen Versuche*, 1314-1478 (Münster, 1896); *Die Lateinischen Dramen von Wimpelings Stylpho bis zur Mitte des Sechzehnten Jahrhunderts*, 1480-1550 (Münster, 1893).

IV

What definitions did Dante accept as conveying proper ideas of tragedy and comedy?

There are several places in the Divine Comedy in which Dante's theory of tragedy and comedy is indicated. For comedy:

e per le note
Di questa Commedia, lettor, ti giuro,
S'elle non sien di lunga grazia vote. . . .
Inferno, XVI, 127-129.

Così di ponte in ponte, altro parlando
Che la mia commedia cantar non cura,
Venimmo. . . .

Inferno, XXI, 1-3.

In these passages he uses the word with reference to his own poem. Virgil, however, refers to his own work as a tragedy:

e così il canta
L'alta mia tragedìa in alcun loco.
Inferno, XX, 112-113.

Dante's basis was almost certainly the *Magnae Derivationes* of Ugucione da Pisa,¹ gathered in turn from the *Elementarium Doctrinae Rudimentum* of Papias and the *Etymologies* of Isidore. Ugucione died in 1210, and although manuscripts of his work are frequent, and Du Cange drew upon him,² it was never printed, probably because it was superseded by the *Catholicon*.³ Of the derivations and definitions given by Dante in his letter to Can Grande, Toynbee says, they are "taken directly from Ugucione . . . under the word *oda*."⁴ Ugucione seems also to be the source of what Greek Dante knew.

¹ Toynbee, *op. cit.*, p. 97. (Reprinted with additions, from *Romania*, XXVI, pp. 537-534.)

² Cf. Du Cange, *Glossarium Mediae et Infimae Latinitatis*, vol. VI (Paris, 1846), p. 633, s.v. Tragoedia, "*Ironia, laus facta de vilibus et fetidis, unde Tragoedisare, dictare*, in Gloss. Bibl. MSS. anonymi ex Ugutione in Bibl. reg."

³ Toynbee, *op. cit.*, pp. 98-99.

⁴ Toynbee, *op. cit.*, pp. 103 ff. Ugucione under the word *oda* says: "*Oda, quod est cantus vel laus, componitur cum comos, quod est villa, et dicitur hec comedia, — e, idest villanus cantus, vel villana laus, quia tractat de rebus villanis rusticanis,*

The *Epistle to Can Grande della Scala* is now accepted by nearly all scholars,¹ and in it Dante accounts for the title of his poem, defining tragedy and comedy, while noting the difference between them, in the usual, authentic manner.²

et affinis est cotidiane locutioni, vel quia circa villas fiebat et recitabatur, vel *comedia* a commensatione, solebant enim post cibum homines ad audiendum eam venire. . . . Item *oda* in eodem sensu componitur cum *tragos* quod est hircus, et dicitur *hec tragedia*, — *e*, idest hircina laus, vel hircinus cantus, idest fetidus; est enim de crudelissimis rebus, sicut qui patrem vel matrem interficit, et commedit filium, vel e contrario et huiusmodi. Unde et tragedo dabatur hircus, idest animal fetidum, non quod non haberet aliud dignum premium, sed ad fetorem materie designandum. . . . Et differunt *tragedia* et *comedia*, quia *comedia* privatorum hominum continet acta, *tragedia* regum et magnatum. Item *comedia* humili stilo scribitur, *tragedia* alto. Item *comedia* a tristibus incipit, sed in letis definit, *tragedia* e contrario; unde in salutationibus solemus mittere et optare amicis tragicum principium et comicum finem, idest principium bonum et letum, et bonum et letum finem."

¹ Cf. E. K. Rand, *The Latin Concordance of Dante and the Genuineness of Certain of his Latin Works* (Boston, 1912), pp. 7-39: Paget Toynbee, *Dantis Alagherii Epistolae* (Oxford, 1920), pp. 160 ff.

² Paget Toynbee, "Dante's Letter to Can Grande (Epist. X.), Emended Text," *Modern Language Review*, XIV (1919), p. 286: "Libri titulus est: 'Incipit Comoedia Dantis Alagherii, Florentini natione, non moribus.' Ad cuius notitiam sciendum est, quod comoedia dicitur a *comos* villa, et *oda* quod est cantus, unde comoedia quasi villanus cantus. Et est comoedia genus quoddam poeticae narrationis, ab omnibus aliis differens. Differt ergo a tragoedia in materia per hoc, quod tragoedia in principio est admirabilis et quieta, in fine sive exitu est foetida et horribilis; et dicitur propter hoc a *tragos* quod est hircus, et *oda*, quasi cantus hircinus, id est foetidus ad modum hirci, ut patet per Senecam in suis tragoediis. Comoedia vero inchoat asperitatem alicuius rei, sed eius materia prospere terminatur, ut patet per Terentium in suis comoediis. Et *hinc* consueverunt dictatores quidam in suis salutationibus dicere loco salutis, 'tragicum principium, et comicum finem.' Similiter differunt in modo loquendi: elate et sublime tragoedia; comoedia vero remisse et humiliter; sicut vult Horatius in sua *Poetria*, ubi licentiat aliquando comicos ut tragoedos loqui, et sic e converso:

Interdum tamen et vocem comoedia tollit,
Iratusque Chremes tumido delitigat ore;
Et tragicus plerumque dolet sermone pedestri
Telephus et Peleus etc.

Et per hoc patet quod Comoedia dicitur praesens opus. Nam si ad materiam respiciamus, a principio horribilis et foetida est, quia *Infernus*; in fine prospera,

References to the style of tragedy and comedy are to be found in the *Convivio*¹ and in the *De Vulgari Eloquentia*,² and they are in accordance with the letter to Can Grande.

Since commenting on Dante was formerly one of the necessary occupations of most Italian scholars, and the reading of Dante is still an essential part of Italian education, his use of the words was constantly reconsidered and perpetuated itself despite other influences.³ Scaliger was to disturb many nineteenth-century critics and scholars by his obstinate refusal to follow the *Poetics* blindly.

Not all of the commentators discuss the matter fully, but many of them do, and a few will be cited here as illustrations. Jacopo della Lana,⁴ for examples, states the differences in accordance with the same authorities from whom Dante derived. Pietro, the son of Dante, explains the title of the work in accordance with the traditional theory,⁵ and besides citing Isidore and Horace, he quotes Boethius, who may perhaps have also been remembered by Dante in this connection.⁶ Francesco da Buti discusses the question with regard to *Inferno* XX, 113, remarking that Virgil calls his work a tragedy on account of the style, the persons, and the progress made from happiness to disaster.⁷ Giovanni Boccaccio treats the matter fully, including such questions as etymology, style of language, and verisimilitude. He finally decides that the poet spoke figuratively, but compares the progress from turbu-

desiderabilis et grata, quia Paradisus. Ad modum loquendi, remissus est modus et humilis, quia locutio vulgaris, in qua et mulierculae communicant. Et sic patet quare comoedia dicitur."

¹ E. Moore, *Tutte le Opere di D. A.* (Oxford, 1904), *Il. Conviv.* I, cap. 5, 50 (p. 242).

² *De Vulgari Eloq.*, II, iv, 4 ff.

³ G. J. Ferrazzi, *Enciclopedia Dantesca* (5 vols. Bassano, 1865-1877), II, pp. 431 ff.

⁴ L. Scarabelli, *Comedia di D. degli A. col commento di Jacopo della Lana* (3 vols., Bologna, 1866), I, p. 351.

⁵ V. Nannucci, *Petri Allegherii super Dantis ipsius Genitoris Comoediam Commentarium* (Florence, 1845-1846) pp. 9 ff.

⁶ G. A. L. Baur, *Boetius und Dante* (Leipzig, 1873); R. Murari, *Dante e Boezio* (Bologna, 1905).

⁷ C. Giannini, *Commento di Francesco da Buti sopra la D. C.* (Pisa, 1858), I, pp. 7 and 531 ff.

lence to tranquillity in the *Commedia*, with the comedies of Plautus and Terence.¹ He refers back to his introduction when he comes to *Inferno* XVI, 128.²

The work of Benvenuto da Imola³ adds something from the study of formal rhetoric and scholastic philosophy, while citing Isidore.⁴ He

¹ G. Milanesi, *Il Comento di Giovanni Boccaccio sopra la C.* (2 vols., Florence, 1863), I, p. 84. Domenico Guerri, *Giovanni Boccaccio, Il Comento alla D.C.* (3 vols., Bari, 1918), I, p. 116: "Il tutto della commedia è (per quello che per Plauto e per Terenzio, che furono poeti comici, si può comprendere): che la commedia abbia turbolento principio e pieno di romori e di discordie, e poi l'ultima parte di quella finisca in pace e in tranquillità. Al qual tutto è ottimamente conforme il libro presente: perciocché egli incomincia da' dolori e dalle turbazioni infernali, e finisce nel riposo e nella pace e nella gloria, la quale hanno i beati in vita eterna."

² Milanesi, *op. cit.*, II, p. 453. Guerri, *op. cit.*, III, p. 229.

³ Cf. Luigi Rossi-Casè, *Di Maestro Benvenuto da Imola* (Pergola, 1889).

⁴ J. P. Lacaita, *Benvenuti de Rambaldis de Imola, Comentum super Dantis Aldigherij Comoediam, nunc primum integre in lucem editum* (Florence, 1887), I, p. 18: "Tragoedia est stylus altus et superbus; tractat enim de memorabilibus et horrendis gestis, qualia sunt mutationes regnorum, eversiones urbium, conflictus bellorum, interitus regum, strages et caedes virorum, et aliae maximae clades; et talia describentes vocati sunt tragoedi, sive tragici, sicut Homerus, Virgilius, Euripides, Statius, Simonides, Ennius, et alii plures. . . . Comoedia est stylus bassus et humilis, tractat enim vulgaria et vilia facta ruralium, plebeiorum, et humilium personarum; et talia describentes vocantur comoedi, sive comici, sicut Plautus, Terentius, Ovidius. Modo est hic attente notandum quod, sicut in isto libro est omnis pars philosophiae, ut dictum est, ita est omnis pars poetriae. Unde si quis velit subtiliter investigare, hic est tragoedia, satyra, et comoedia. Tragoedia quidem, quia describit gesta Pontificum, Principum, Regum, Baronum, et aliorum magnatum et nobilium, sicut patet in toto libro. Satyra, idest reprehensoria; reprehendit enim mirabiliter et audacter omnia genera viciorum nec parcit dignitati, potestati, vel nobilitati alicujus. Ideo convenientius posset intitulari satyra, quam tragoedia, vel comoedia. Potest etiam dici quod sit comoedia, nam secundum Isidorum Comoedia incipit a tristibus et terminatur ad laeta. Et ita liber iste incipit a tristi materia, scilicet ab Inferno et terminatur ad laetam, scilicet ad Paradisum, sive ad divinam essentiam. Sed dices forsan, lector: cur vis mihi baptizare librum de novo, cum autor nominaverit ipsum Comoediam? Dico quod autor potius voluit vocare librum Comoediam a stylo infimo et vulgari, quia de rei veritate est humilis respectu litteralis, quamvis in genere suo sit sublimis et excelsus. Deinde tangitur in titulo causa efficiens, cum dicitur Dantis Aldigherii; et materia, cum dicitur, in qua agitur de Inferno, sive causa materialis et subjectum libri primi."

distinguishes between the species on grounds of style,¹ repeating the point on *Inferno* XX, 113,² and *Inferno* XXI, 2.³ The writer usually known as the Anonimo Fiorentino, deals with *Inferno* XX, 113, in the customary manner, but also employs material from the letter to Can Grande.⁴ Christophoro Landino explains Virgil's references on the basis of style and the nature of his themes.⁵ Velutello mentions only the style as a reason for calling the *Aeneid* a tragedy.⁶ Tasso later observes that the *Aeneid* is in his time usually considered an epic, but he justifies Dante on the basis of the remarks in *De Vulgari Eloquentia*.⁷

It was not until the middle of the sixteenth century that any difference between Dante and the *Poetics* troubled the critics. Gelli, in his lectures on the *Commedia* says, in defending Dante, that his error was not of much importance in the poet's time, and he quotes the letter to Can Grande. He also declares that if Aristotle had read Dante as he had read Homer, he would have framed his theory to include the Italian poet. In similar fashion he compares the work of Michelangelo and that of the ancients, concluding that Michelangelo's achievement is in no way inferior to that of antiquity. Although Dante did not construct his poem on the basis of rules, his performance did not fall below that of the dramatic poets of classical times.⁸ Another rabid defender of Dante in the controversy was Giacompo Mazzoni, who, however, in 1572 made an attempt to reconcile Dante and the *Poetics* without introduc-

¹ *Ibid.*, I, p. 154: "Homerus, Virgilius, et Lucanus scripserint in alto stilo, scilicet tragedia, tamen Horatius scripsit in mediocri stilo, puta satira, et Ovidius in basso, scilicet comedia."

² *Ibid.*, II, p. 88: "*e l'alta mia tragedia*, quia est stylus altus, et de rebus altis tractans, *canta*, idest poetice describit, *in alcun loco*, scilicet tertio Eneidos."

³ *Ibid.*, II, p. 95: "*che la mia comedia*, idest meus liber vulgaris, *cantar non cura*, idest poetice describere. . . ."

⁴ P. Fanfani, *Commento alla D. C. d'Anonimo Fiorentino*, I (Bologna, 1866), pp. 451 and 461.

⁵ *Comento di Christophoro Landino sopra la Com. di D. A. (Opere del Divino Poeta Danthe, Bibliotheca S. Bernardini)* Venice, 1512, f. 131 r.

⁶ *La Comedia di Dante Aligieri con la Nova Espositione di A. Velutello* (Venice, 1544), in loc.

⁷ *La D. C. di D. A. Postillata da T. Tasso*, 3 vols., I (Pisa, 1830), p. 153.

⁸ C. Negroni, *Giovan Batista Gelli sopra la C. di D.* (Florence, 1887), *Lettura Ottava*, II, p. 296-297.

ing considerations of historical development.¹ The critic Daniello da Lucca, on *Inferno* XX, 113, mentions reasons of style and the death of Turnus.² It is interesting to see the comments and solutions of other writers,³ but those given will suffice to show the persistence of Dante's use and its acceptance.

V

What definitions did Chaucer accept as conveying proper ideas of tragedy and comedy?

Chaucer's conception of tragedy was the usual one among scholars of his and preceding times,⁴ and is clearly stated in his translation of Boethius: ⁵ "What other thing biwailen the cryinges of tragedies but only the dedes of Fortune, that with an unwar stroke overtorneth the realmes of grete nobley?" ⁶

¹ Mario Rossi, *Discorso di Giacompo Mazzoni in Difesa della Commedia del Divino Poeta Dante* (Città di Castello, 1898), p. 74.

² *Dante con l'Espositione di M. Bernardino Daniello da Lucca* (Venice, 1568), p. 134.

³ R. Andreoli, *La C. di D. A.* (Naples, 1863), p. 131; L. G. Blanc, *Göttliche Komödie* (Halle, 1864), on *Inf.*, XX, 113; G. da Siena, *Com. di D. A.* (Naples, 1867-70), on *Inf.*, XX, 113; K. Vossler, *Die Göttliche Komödie*, 4 vols. in 2 (Heidelberg, 1908), III, 306 (881), and IV, 57 (963). P. H. Wicksteed and E. G. Gardner, *Dante and Giovanni del Virgilio*, (Westminster, 1902), p. 293.

⁴ Cf. G. L. Kittredge, *Chaucer and his Poetry* (Cambridge, 1915), p. 110.

⁵ Skeat, *op. cit.*, p. 143 (*Prose* II, l. 75). Cf. B. L. Jefferson, *Chaucer and the Consolation of Philosophy of Boethius* (Princeton, 1917), p. 165: "How much the *Consolation* determined Chaucer's own attitude toward life, it is difficult to determine with precision. At the least, it may be said that Boethius and Chaucer were compatible in point of view and that Chaucer found in Boethius, in many ways, a congenial spirit. At the most, it may be said that Boethius was an influence so profound that he completely determined Chaucer's view of the meaning of life and of the way in which life should be conducted. The truth no doubt lies somewhere between the two extremes, and Boethius probably accentuated and extended views which Chaucer already had temperamentally."

⁶ The influence of Chaucer on all students of English made even Archer, *Play-Making* (New York, 1928), p. 261, seek to reconcile Chaucer and the *Poetics*. He notes that Chaucer's lines show that peripeteia or reversal of fortune was the "very essence and meaning of tragedy" in the Middle Ages.

To this is added: "Glose. Tragedie is to seyn, a ditee of a prosperitee for a tyme, that endeth in wrecchednesse."¹

Ten Brink quoted Dante's letter to Can Grande and thought that Chaucer had thence derived his theory.² But since Miss Petersen's investigation,³ we know that theory is wrong, as well as others which supposed the source of the gloss was the French prose translation ascribed to Jean de Meung or the Latin commentary on Boethius formerly attributed to St. Thomas Aquinas. Miss Petersen established the fact that Chaucer's source was the unpublished commentary by Nicolas Trivet, which included those of Jean de Meung and the pseudo-Aquinas.⁴

Trivet's theory of tragedy in his edition, with commentary, of Seneca's tragedies,⁵ early in the fourteenth century, was based largely on Isidore.⁶ His long note on the passage in Boethius was kindly sent me by Miss Petersen from unpublished material.⁷

Chaucer's agreement with that theory is indicated in various passages of his own poems. For example, in the *Troilus and Criseyde*:⁸

Go, litel book, go litel myn tragedie;
Ther god thy maker yet, er that he dye,
So sende might to make in some comedie!
But litel book, no making thou n'envye,
But subgit be to alle poesy;e;
And kis the steppes, wher-as thou seest pace,
Virgile, Ovyde, Omer, Lucan, and Stace.

¹ Skeat, *op. cit.* (*Prose II*, l. 78).

² B. Ten Brink, *Chaucer* (Münster, 1870), I, p. 78.

³ K. O. Petersen, "Chaucer and Trivet," *Publ. Modern Lang. Assoc.*, XVIII (1903), pp. 173-193.

⁴ The sources which Miss Petersen used were Addit. MSS. 19585 and 27875, British Museum.

⁵ Given in full detail in Peiper, *De Senecae Tragœdiarum Vulgari Lectione* (Breslau, 1893).

⁶ Creizenach, *op. cit.*, I, p. 487 ff.

⁷ "Secundo cum dicit Quid tragediarum probat mutabilitatem fortune divulgare cotidianis clamoribus quia clamores poetarum cotidie in theatro recitancium tragedias nichil aliud continebant quam mutabilitatem fortune. Et nota quod tragedi dicuntur secundum Ysidorum, Ethi. li. 18c. de Ludo Scenico: illi qui antique gesta atque facinora sceleratorum regum luctuoso carmine spectante populo concinebant. Unde tragedia est carmen de magnis iniquitatibus a prosperitate incipiens et in adversitate terminans. Et dicitur tragedia a tragos quod est ycrus. . . ."

⁸ Skeat, *op. cit.*, p. 324 (V, 1786-1792).

the envoy corresponds to his initial purpose:¹

The double sorwe of Troilus to tellen,
That was the king Priamus sone of Troye,
In lovinge, how his aventures fellen
Fro wo to wele, and after out of joye,
My purpos is, er that I parte fro ye.
Thesiphone, thou help me for t'endyte
Thise woful vers, that wepen as I wryte!

In the *Monk's Prologue* again, we find:²

Tragedie is to seyn a certeyn storie,
As olde bokes maken us memorie,
Of him that stood in greet prosperitee
And is y-fallen out of heigh degree
Into miserie, and endeth wrecchedly.
And they ben versified comunly
Of six feet, which men clepe *exametron*.
In prose eek been endyted many oon,
And eek in metre, in many a sondry wyse.

Although Skeat supposed that the gloss on the passage in Chaucer's translation of Boethius was original with Chaucer himself,³ he noted correctly that the authors mentioned at the end of the first passage from *Troilus* quoted above were models which, in accordance with mediaeval usage, prompted him to term works in heroic hexameters tragedies. This superficial confusion is really testimony to the persistence and weight of the definitions derived from the dialogue *On Poets*, because of the similarity of characters and themes in epic and tragedy, and the term heroic was used both with regard to the metre of epic and also in the traditional formula.⁴

¹ *Ibid.*, p. 206 (I, 1-7).

² *Ibid.*, p. 531 (T. 3163-3171).

³ W. W. Skeat, *Chaucer, The Prioresses Tale, Sire Thopas, et cet.* (4th ed., Oxford, 1888), p. 173, on line 3163, and p. 193.

⁴ Several important topics have necessarily been omitted in this whole discussion, because of lack of space. One of them is the history of the terms used to designate the metres of tragedy and comedy. Another is the relation of the conceptions of fortune, chance, and luck to tragedy. The latter is treated from the mediaeval point of view in H. R. Patch, *The Goddess Fortuna in Mediaeval Literature* (Cambridge, 1927), pp. 68 ff.

The *Monkes Tale*, at the very beginning, recurs to Chaucer's conception of tragedy:¹

I wol biwayle in maner of Tragedie
The harm of hem that stode in heigh degree,
And fillen so that ther nas no remedie
To bringe him out of hir adversitee.

The miseries of Sampson arouse an echo of the definition which Chaucer accepted,² as well as the fate of Ugolino,³ and in the story of Croesus,⁴ the gloss on Boethius is versified:

Tragedie is noon other maner thing,
Ne can in singing crye ne biwaille,
But for that fortune alwey wol assaille
With unwar strook the regnes that ben proude.

The effect of Chaucer's views is to be seen among his contemporaries and successors, particularly in Lydgate, who repeats the idea frequently,⁵ and in one place also puts the gloss into verse.⁶ The theory is found frequently in his *Troy Book*; ⁷ he explains comedy as well as tragedy:

A comedie hath in his gynnyng,
A prime face, a maner compleynyng,
And afterward endeth in gladness.

But tragidie, who so list to knowe,
It begynneth in prosperite,
And endeth euer in aduersite;
And it also doth þe conquest trete
Of riche kynges and of lordys grete.

¹ Skeat, *Student's Chaucer*, p. 531 (T. 3181-84).

² *Ibid.*, p. 532 (T. 3267): "Sith thou fro wele art falle in wrecchednesse."

³ *Ibid.*, p. 537 (T. 3647-3648).

⁴ *Ibid.*, p. 541 (T. 3951-3954).

⁵ J. O. Halliwell, *A Selection from the Minor Poems of Dan John Lydgate* (Percy Society, No. 2, London, 1840), pp. 25 and 128.

⁶ H. N. MacCracken, *The Minor Poems of John Lydgate* (E. E. T. S.), I, 1911 (for 1910), p. 73.

⁷ H. Bergen, *Lydgate's Troy Book, A.D. 1412-30* (E. E. T. S.), I (London, 1906), pp. 168-169.

The same idea is found in his *Fall of Princes*,¹ and also in Henryson's *Testament of Cresseid*.²

Throughout the sixteenth century Lydgate's translation of Boccaccio's *De Casibus Virorum et Feminarum Illustrium* was popular, and thus served to illustrate the persistence of the mediaeval significance.³

In 1554 we also find Hawes speaking of Chaucer's *Legend of Good Women* as consisting of tragedies.⁴

Thus, in both Dante and Chaucer the Peripatetic inheritance survived in extended form, although they are the mediaeval authors most frequently patronized by recent critics.⁵ Such critics fail to consider several obvious points: (1) There is a clear line of descent for this

¹ C. F. E. Spurgeon, *Five Hundred Years of Chaucer Criticism and Allusion* (London, 1914), I, p. 43.

² G. Gregory Smith, *The Poems of Robert Henryson* (Edinburgh and London, 1908), III, p. 3.

³ Cf. the title of a copy in the Library of Harvard College: "A Treatise Excellent and Compendious, Shewing and Declaring, in Manner of Tragedye, the Falles of Sondry Most Notable Princes and Princesses with Other Nobles, Through ye Mutabilitie and Change of Unsteadfast Fortune Together with Their Most Detestable and Wicked Vices. First Compyled in Latin by the Excellent Clerke Bocatius, an Italian Borne. And Sence that Tyme Translated into our English and Vulgare Tongue, by Dan John Lidgate Monk of Burye, etc. In Aedibus Richard Tottelli, London, 1554."

⁴ Stephen Hawes, *Pastime of Pleasure*. (In C. F. E. Spurgeon, *Five Hundred Years of Chaucer Criticism and Allusion*, E. E. T. S., I (1914), p. 67.):

And then the tragedies, so piteous
Of the ninetene ladyes, was his translation.

⁵ The extremes to which some writers go to reconcile the Middle Ages and the *Poetics* are exemplified in the following. K. Vossler, *Poetische Theorien in der italienischen Frührenaissance* (Berlin, 1900), p. 26: "Es versteht sich von selbst, dass der Verfasser der Eccerinis die Tragödie als Dichtungsgattung und nicht mehr als Stilart auffasste, wie das ganze Mittelalter und Dante noch gethan hatten. Ja er muss sogar auf irgend welchen Wege schon die tragischen Theorien des Aristoteles kennen gelernt haben, wie wir aus den folgenden Versen hervorzugehen scheint:

Vox Tragici mentes ad contingentia fortes
Efficit, ignavus diluiturque metus,
Vincit in adversis semper constantia rebus,
Non habet hanc illis qui rude pectus habet
Tunc cum victor eris, vinci potuisse putabis
Constringit movens anxia corda timor.

theory back to the earliest Peripatetics. (2) It was a theory which abundantly satisfied Greek and Roman antiquity. (3) It was held by people who were perfectly familiar with classic drama. (4) It was found more satisfactory by people who knew both the classical drama and the *Poetics* of Aristotle. (5) It survived and references to it continued both while there was a wide-spread knowledge of classic drama and afterward. (6) It has also seemed, until the nineteenth century, to state more concisely than the definition in the *Poetics* the tragic essence of tragedy and the comic essence of comedy. (7) It more adequately corresponds to the metaphorical use of the words tragedy and comedy. (8) The metaphorical use and the persistence of the formulas preserved by the Roman grammarians are sufficient reasons for the practice of Dante and Chaucer. The Italian and the English mediaeval poets can hardly be held to account because they lacked a knowledge of classical drama and modern classical philology on the one hand, or, on the other, a prophetic vision of what would happen when transcendental philosophy and classical philology devoted themselves to a combined attack on the *κάθαρσις* clause of Aristotle's *Poetics*.¹

VI

What definitions of tragedy and comedy dominated the ideas of Continental Europe during and after the Renaissance?

It would have been a unique event in the history of thought if the general classical and mediaeval theory of tragedy and comedy had been immediately abandoned on the recovery of Aristotle's *Poetics*, but such an unparalleled development has been postulated by many historians of literature.² It is part of the exaggerated contrast between the Mid-

¹ As Schelling, Hegel, Schlegel, and Schopenhauer determined the German interpretation of the *Poetics* throughout most of the nineteenth century, one finds Croce dominating the Italians. Cf. Rostagni, "Aristotele e l'Aristotelismo nella Storia dell' Estetica Antica," *Studi Italiani di Filologia Classica*, N. S., II (1922), pp. 83-84. It is hardly necessary to point out the injury to historical criticism suffered from this cause.

² Giuseppe Toffanin, *La Fine dell' Umanesimo*, Turin, 1920, however, points out that the systematic study of the *Poetics*, codification of the rules of the drama, and treatment of it as an inspired and uniquely authoritative document develop conspicuously as a result of forces active until the Council of Trent; forces which after it were directed to the study of poetry rather than theology.

dle Ages and the Renaissance. J. A. Symonds, to exalt the Renaissance, must correspondingly depress the significance of the Middle Ages. Of the revival of learning, for example, he says:¹ "For a generation nursed in decadent scholasticism and stereotyped theological formulas it was the fountain of renascent youth, beauty and freedom, the shape in which the Helen of art and poetry appeared to the ravished eyes of mediaeval Faustus." But the break with the Middle Ages was by no means complete or sudden, and the theory of tragedy and comedy in the Renaissance and after was far from being an entirely original or independent study of an inspired document, newly revealed.

The divergence of Renaissance theory and practice from the *Poetics*, especially with regard to tragedy, has puzzled many historians, and many explanations have been offered, including ignorance, perversity of spirit, sheer eccentricity, and, more credibly, the aim of reconciling Horace and Aristotle, or the slavish imitation of Seneca.² If the mediaeval conception had been correct and authentic but too inclusive, then the ideas of the Renaissance tended to err in being too restrictive and legalistic.

Scholars were never entirely without sound theory of the drama, even when they lacked the *Poetics*, and their renewed knowledge of classical drama and classical grammar yielded, to their minds, confirmation of the traditional theory. The scholastic principles of analysis and classification grounded on Aristotelian logic and metaphysics found a new outlet for scholars in the *Poetics*, a document obviously exemplifying the same characteristics. Whereas theology and philosophy, had, for the time being, been thoroughly worked by that method, the *Poetics* provided the generations immediately after the Council of Trent with a new and fresh field, where there was no danger to the faith and a splendid model was offered.³

¹ *Encyclopaedia Britannica* (11th ed., 1911), XXIII, p. 86.

² C. H. Conrad Wright, *History of French Literature*, New York, 1912, p. 211.

³ Cf. Toffanin, *op. cit.*, pp. 1-2: "Nell' anno 1548, mentre a Roma si lavorava, fra illusioni e dubbi, a preparare e a procrastinare quel Concilio da cui doveva uscire così mutato e contrastante l'aspetto spirituale d'Europa, un giovine udinese, sceso a Firenze con molta dottrina umanistica, offriva a Cosimo de' Medici il primo commento all' 'Arte poetica' di Aristotele. L'animo del Robortelli non sospettava — ne siamo certi — che quella sua ambizione erudita, iniziava, per la letteratura, l'età del Concilio di Trento: ma il genio della storia aveva stabilito

The history of the editions and study of the *Poetics* has been outlined by Sandys,¹ following Spingarn,² and there is no need to repeat it here.³ The traditional theory of tragedy and comedy was, however, present in the minds of most of the Renaissance scholars,⁴ and Lanson has shown how reluctantly the traditional formulas were abandoned, if at all.⁵

The classical authors read during the Middle Ages were not surrendered in exchange for the newly recovered texts, including the *Poetics*. Convincing evidence of the persistence of the traditional formulas is offered by a study of the early printed editions. The pressure of need for widespread approval is felt by the publisher of a printed book even more keenly than by the editor and scribes of a manuscript. When, therefore, the earlier editions of classical texts are accompanied by the traditional apparatus, it is certain that this was no blind following of precedent but the response to an imperative demand.

così perchè, da quel giorno — proprio da quel giorno — l' 'Arte poetica' diventa il canovaccio su cui una gente, preoccupata e offuscata da grandi pensieri e da meschini pregiudizi, tesse le trame d'una scolastica letteraria e si prepara due secoli di decadenza che si chiamerà prima secentesimo e poi Arcadia e avrà fine solo col romanticismo."

¹ Sandys, *op. cit.*, II, pp. 133 ff.

² J. E. Spingarn, *History of Literary Criticism in the Renaissance* (3d ed., New York, 1912). The Italian translation contains valuable additional material: J. E. Spingarn, *La Critica Letteraria nel Rinascimento*. Traduzione italiana del Dr. Antonio Fusco (Bari, 1905).

³ An indispensable aid in any study of the *Poetics* is: Lane Cooper and Alfred Gudeman, *A Bibliography of the Poetics of Aristotle* (Cornell Studies in English, XI, New Haven, 1928).

⁴ Cf. Gustave Lanson, "L'Idée de la Tragédie en France avant Jodelle," *Revue d'Histoire Littéraire de la France*, XI (1904), p. 585, for Scaliger's acceptance of the traditional definitions: "On y remarquera surtout que, chez Scaliger, la définition de la tragédie, la notion du sujet tragique restent traditionnelles. Il retient toute l'idée que Cloetta a constatée dans les glossaires et les sommes du moyen âge," etc.

⁵ *Ibid.*, pp. 541: "Un des plus fâcheux effets de la distribution traditionnelle du travail entre les érudits appliqués au moyen âge et les critiques qui ne voient rien au delà de la Renaissance, a été de faire croire à une coupure réelle et précise dans le développement littéraire de notre pays. Cette croyance a entraîné diverses erreurs dans la représentation du mouvement intellectuel du XVI^e siècle. On a commencé de nos jours à les percevoir. J'en voudrais signaler et, si je puis, détruire encore une."

EDITIONS OF BOETHIUS

Boethius was, for example, an author read as widely during the Renaissance as during the Middle Ages, and constantly reprinted. The note on the passage referring to tragedy was merely the mediaeval gloss repeated or expanded.¹ The same explanation is found in editions such as that printed at Basel in 1570,² and the note in the Delphin edition at the end of the seventeenth century,³ neglects any reference to the *Poetics* but clings to Horace and the grammarians. This was the most popular and accepted text until the German editions of the nineteenth century, but the Delphin edition was reprinted in London in 1823,⁴ and it was reproduced verbatim in Migne's edition.⁵

EDITIONS OF TERENCE

Terence, in particular, was reprinted with the same apparatus that had been used in the latter days of the Roman Empire and through the Middle Ages. Nearly all the printed editions, until recent times, carried the treatise of Donatus as well as his life of Terence.⁶ The great popularity of these comedies in the Renaissance and satisfaction with the explanation of the grammarian is one of the best attested facts in the history of literature.⁷ In cases where Renaissance scholars provided

¹ *Severini Boethii de Consolatione Philosophiae Libri Quinque. Cum Praeclaris Joannis Murmellii Commentariis, cumque Rodolphi Agricolaе Phrisii et Augustini Enarratione* (2d ed., n. p. 1515), fol. xxxii, v., quotes Diomedes and repeats the anecdote about Euripides and Archelaus.

² *Philosophorum et Theologorum Principis Opera Omnia* (Joannis Murmellii in V. Lib. De Consol. Phil. Com.), (Basel, 1570).

³ *Boetii De Consolatione, et cet. Interpretatione et Notis Illustravit Petrus Callyus. In Usum Seren. Delphini* (Paris, 1695).

⁴ *Boethii De Consolatione Phil. Lib. V. Ex Ed. Vulpiana cum Notis et Interpretatione in Usum Delphini* (London, 1823).

⁵ Migne, *Patr. Lat.*, LXIII, col. 667 ff.

⁶ Cf. the following editions in the Library of Harvard College: *Terentii Comœdiarum cum Donati Interpretis Commentario* (Treviso, 1477; *Terentius cum Donato* (Venice, 1492); *Terentius cum Duobus Commentis Uidelicet Donato et Guidone* (Venice, 1494).

⁷ H. W. Lawton, *Terence en France au XVI^e Siècle (Contribution à l'Histoire de l'Humanisme en France)*, Paris, 1926, follows out the ideas of Lanson. This study lists all the editions, so far as the author could discover, printed during the fifteenth

new discussions of tragedy or comedy, they relied on the standard sources on which the Middle Ages had also depended.¹ The popularity of such equipment for the intelligent reading of Terence is shown by many other editions during the following centuries, of which that published at Amsterdam and Leyden will serve as an example.²

EDITIONS OF SENECA

Seneca, who, with Terence, provided models most acceptable to early Humanistic drama, appeared with commentaries relying in greater or less degree on the traditional theory. An edition of 1498, for example, had two scholars to explain it, to whom a third, Badius, was added in 1514.³ But as Lanson points out, while Aristotle is mentioned as an authority for dividing tragedy into six parts, the discussion is actually based mainly on Donatus and Diomedes.⁴ The same writer shows that the tragedies of Seneca conformed to the definitions of Diomedes, and, interpreted in this light, they provided the most influential model for the Renaissance.⁵

and sixteenth centuries. He mentions 446, as well as 59 editions of separate plays. In those editions which Lawton himself examined a full statement of the contents is given. To judge from the information afforded by Lawton, we find most editions reprint the traditional treatises of Donatus or material derived from him.

¹ Lanson, *op. cit.*, pp. 544: "Jodocus Badius a donc ou conservé ou retrouvé la doctrine du moyen âge. Sujets historiques, calamités royales et bouleversements des États, chute du bonheur au malheur et dénouements funestes, style majestueux et abondance de rhétorique exclamative ou plaintive; c'est exactement la théorie que W. Cloetta a constatée au moyen âge."

² *Publii Terentii Carthaginiensis Afri Comoediae VI. His Accedunt Integrae Notae Donati, Eugraphii, Faerni, Boecleri, Farnabii, Mer. Casauboni, Tan. Fabri. Amstelodami, et Lugd. Batav., 1686.* Contains: (1) *Danielis Heinsii ad Horatii de Plauto et Terentio Judicium Dissertatio*; (2) *Euanthius de Trag. et Com.*; (3) *Donati Fragmentum de Comoedia et Tragoedia*; (4) *De Fabularum, Ludorum, Theatrorum, Scenarum, ac Scenicorum antiqua consuetudine libellus, ex optimis auctoribus collectus, ad Comicos facilius intelligendos. Praecipue conscriptus in gratiam studiosae juventutis*; (5) *T. Fabri Observatiunculae Miscellaneae*; (6) *Tanaquilli Fabri Notulae ad Terentium, et cet.*

³ *Tragoedia Senecae cum Duobus Commentariis: Videlicet Bernardini Marmitae et Danielis Gaetani* (Venice, 1498).

⁴ Lanson, *op. cit.*, p. 547.

⁵ *Ibid.*, p. 546.

EDITIONS OF HORACE

Even Horace, who was cited by the grammarians for his derivations, was not left without scholarly comment, and in the French edition of 1529, four authorities united to explain the classic author, quoting the pertinent passage in Diomedes on the ode dedicated to *Pollio*, while the *Ars Poetica* was made clear by reference to the same ancient source.¹

ERASMUS

The appearance of a Greek text did not, moreover, do away with all Latin texts or translations, as many enthusiastic students of the Renaissance imagine.² The translations of Greek plays into Latin, such as those of Erasmus,³ fail to show any effect of the *Poetics*, but rely wholly on the classical grammarians.⁴ It is probable, indeed, that such plays as *Hecuba* enjoyed the greater popularity because of fulfilling the definition of Diomedes.⁵

Lanson concludes,⁶ that when the Humanistic drama appeared, it was determined in its essentials by Donatus and Diomedes,⁷ supported by Horace and Vitruvius.⁸

¹ *Ibid.*, pp. 572-573.

² *Ibid.*, p. 545.

³ Cf. *Hecuba, & Iphigenia in Aulide Euripidis Tragoediae in Latinum Tralatae Erasmo Roterdamo Interprete*, Venice (Aldus), 1507. Erasmus (f. 3 r., *ibid.*) took Horace's ironic reference to the metre of the tragedy seriously and apologized for the lack of such a quality in his own translation: "Iam ueroque Latinae Tragoediae grandiloquentiam, ampullas, & sesquipedalia (ut Flaccus ait) uerba hic nusquam audient, mihi non debent imputare, si interpretis officio fungens, eiusquem uerti, pressam sanitatem, elegantiamque; referre malui, quam alienum tumorem, qui me nec alias magnopere delectat."

⁴ Lanson, p. 549. For Erasmus's neglect of Aristotle's *Poetics*, cf. p. 545.

⁵ *Ibid.*, pp. 549-550.

⁶ *Ibid.*, p. 580: "Ainsi à la veille du jour où Jodelle écrivait, la notion de la tragédie était, pour l'essentiel, composée dans les esprits français par les définitions et les remarques de Donat et Diomède, aux-quelles s'ajoutait Horace, et un texte de Vitruve."

⁷ On the significance of Vitruvius for Renaissance theory and criticism, cf. Lanson, *Revue de la Renaissance* (March-April, 1904), pp. 72-84.

⁸ The usual explanation of the situation suffers from a misunderstanding with regard to the influence of the *Poetics* on the Renaissance drama. Cf. Arthur Tilley, *The Literature of the French Renaissance*, II (Cambridge, 1904), pp. 97-98: "Ac-

POLYDORE VIRGIL

The work of Polydore Virgil, *De Inventoribus Rerum*,¹ was popular throughout Europe, appearing in numerous editions. Book I, chapter 10, on tragedy and comedy, derives from Donatus and Diomedes.²

G. B. CASALI

A systematic treatise on tragedy and comedy was produced by G. B. Casali,³ whose discussion is preserved in the collection of Gronovius.⁴ His explanation of *κἀθαρσις* is still another variation on the most discussed passage in the *Poetics*.⁵ He cites the relevant words in the *Politics*, and develops them to make it seem that Aristotle's thought is a sort of spiritual decorum.⁶ Both forms of drama are essentially moralizing and instructive in nature;⁷ the difference

cording to the theory which the Renaissance critics built up partly on the practice of the ancients, and partly on a misunderstanding or at least a careless reading of certain precepts in Aristotle's *Poetics*, tragedy and comedy were two perfectly distinct species of drama. Tragedy deals with princes, ends unhappily, and is written in a lofty style. Comedy on the other hand draws its characters from the middle or lower classes, employs a familiar style, and ends happily."

¹ Paris, 1499.

² Lanson, *op. cit.*, p. 545.

³ Floruit 1500-1525.

⁴ Gronovius, *Thesaurus Graecarum Antiquitatum*, VIII, cols. 1598 ff., *Joannis Baptistae Casalii Romani, De Tragoedia et Comoedia Lucubratio*.

⁵ *Ibid.*, col. 1600: "Dicitur Tragoedia ejusmodi personarum illustrium actiones idcirco imitari, et spectatoribus proponere; ut contendat animi moerorem, ac commiserationem concitare ad illas ipsas, quas commovet, perturbationes absterquendas."

⁶ *Ibid.*, "Adde quod saepe numero perperam homines dolent, ac pertimescunt iis de causis, ob quas minus dolere, ac extimescere par esset: & cum in Tragoediis proponuntur res commiseratione, ac terrore dignissimae, apprehendunt homines quid et quo tempore dolendum, et commiserandum sit, quae utilitas et vitae fructus est maximus, ut docet Arist. *Politic.* lib. VIII. sub finem."

⁷ An effective (?) argument about the didactic and moral value of drama was made several centuries later by the critic who invented the term "Beaux-Arts": L'Abbé J. B. du Bos, *Réflexions Critiques sur la Poésie et sur la Peinture* (3 vols., Dresden, 1760), I, pp. 424-425: "... je veux dire seulement que les Poèmes dramatiques corrigent quelquefois les hommes, & que souvent ils leur donnent l'envie d'être meilleurs. C'est ainsi que le spectacle imaginé par les Lacédémoniens, pour

consists in the kind of people they represent and to whom they appeal.¹

TRISSINO

Trissino's work on poetry, published in 1529 and 1563,² defines tragedy in accordance with the *Poetics*, but for comedy he merely parallels the pattern of that for tragedy.³ He criticizes Dante for calling his poem a comedy, whereas it is more properly an epic.⁴ Trissino

inspirer l'aversion de l'yvrognerie à leur jeunesse, faisoit son effet. L'horreur que la manie et l'abrutissement des esclaves, qu'on exposoit yvres sur un théâtre, donnoit aux spectateurs, laissoient en eux une ferme résolution de resister aux attrait de ce vice. Cette résolution empêchoit quelques jeunes gens de prendre du vin avec excès, quoiqu'elle ne fût point capable d'en retenir plusieurs autres. . . . La Tragédie purge donc les passions à peu près comme les remèdes guérissent, et comme les armes défensives garantissent des coups des armes offensives. La chose n'arrive pas toujours, mais elle arrive quelquefois."

¹ Gronovius, *op. cit.*, col. 1606: "Ex omni mortalium numero Comoedia sibi proposuit imitandos deteriores. Quoniam duo hominum genera turbas in civitate faciunt; unum eorum qui potentia atque opibus pollent: alterum eorum qui rerum inopia, & desperatione laborant. Igitur ad continendos in officio atque instituendos utrosque hominum ordines, duabus Poeticae dramaticae formis Tragoediae & Comoediae datus est locus. Tragoedia quippe admonet primarios & Principes, ut intueantur in exitus infelicissimos virorum potentium, qui limites aequi & recti per vim egredi voluerunt: Comoedia docet inopes & destitutos de felici rerum deploratarum, involutarumque successu bene sperare; etenim videtur magis fuisse consentaneum rationi successum illum exprimere in ordinibus deterioris fortunae, qui saepissime solent a rebus adversis gradum ad secundas & prosperas facere, quam in Principibus, qui plerumque a statu vitae secundo corruunt in adversum."

² Four divisions of the subject were published first by Trissino, with a long intermission before the last two: *La Poetica di M. Giovan Giorgio Trissino* (Vicenza, 1529); *La Quinta et la Sesta Divisione Della Poetica* (Venice, 1562, 1563). Both are found in *Tutte le Opere* (Verona, 1729), under the title, *Le Sei Divisioni Della Poetica*.

³ G. F. Trissino, *Tutte le Opere*, II (Verona, 1729), p. 95 and p. 120. Cf. Spingarn, *op. cit.*, p. 76.

⁴ Trissino, II, p. 120: "Resta adunque a trattare la imitazione de le azione, e costumi de i piu bassi, e peggiori, la quale si fa col deleggiarli, e biasmarli, et a quel modo insegnare a gli uomini la virtù, il che comunemente si suol fare con le Commedie, ne le quali il Poeta non parla mai da se, come avemo veduto, che si fa ne le Tragedie, ma sempre induce persone, che parlino, e facciano; e così ancora si fa ne le Egloghe pastorali. . . . La Commedia adunque imita le azione peggiori con sermone, ritmo,

was also one of the first to emphasize the unity of time,¹ and to make the epic a routine topic of scholarly criticism.²

For some reason, it is to be noted, Aristotle had not treated comedy in the *Poetics* with the same elaboration with which he had discussed tragedy, and thus when scholars afterwards treated comedy, they were obliged to have recourse to a dull mechanical imitation of the definition of tragedy in the *Poetics*, such as the *Tractatus Coislinianus* offers, or to the traditional Peripatetic formula. The various difficulties of comedy have placed later scholars, who accepted the verbal inspiration of the *Poetics*, in an embarrassing position. Most of them have placed their trust in the principle of cataclysm, like an older generation of geologists, and supposed that Aristotle did write on comedy in a second part of the *Poetics* which has disappeared. A few recent writers have even welcomed the *Tractatus*. But most scholars since the Renaissance have bridged the gap by a judicious combination of the *Poetics* with the traditional theory of comedy.

et armonia, come la Tragedia; et imita una azione sola, compiuta, e grande, la quale abbia principio, mezo, e fine; ma in questo e differente de la Tragedia, che come quella fa la sua dottrina con la misericordia, e con la tema, così questa la fa col deleggiare, e col biasmare le cose brutte, e cattive . . . e per tal causa alcuni hanno pensato, che Dante nominasse Commedia il suo Poema, perciò che termina in bene, cioè ne l'essere stato in Cielo fra l'anime beate; et altri vogliono, che più tosto così lo nominasse, per lo stile mediocre, in cui volea mostrare averlo scritto, perciò che ancora nomina Tragedia lo Eroico di Virgilio, per essere in lo stile alto. E poi nel suo libro de la Volgare Eloquenza egli nomina lo stile alto Tragico, et il mediocre Comico, et il basso Elegiaco, ma sia per qual causa si voglia, quel suo poema non si puo nominar Commedia, per non aver nulla di quello, che a la Commedia s'appartiene; ma essendo Dante nato in quella età roza, et imbarbarita, che non conobbe ne vaghezza di stile Latino, nè arte retorica, nè poetica, quantunque egli fosse di profundissima memoria, e di ingegno acutissimo, et elevato, e di natura quasi miraculosa, e fosse di quella Teologia, e Filosofia, et Astrologia già imbarbarite instruttissimo, e ne le lettere sacre molto esercitato, e de le istorie, e favole Greche, Latine, et Ebraiche dottissimamente informato, e de le cose de i suoi tempi mirabilmente instrutto, non potea però fare, che per lo difetto di quei secoli, non incorresse in alcuni piccioli errori, come fu questo di nominare Commedia la opera sua, la quale (como ho detto) non ha nulla di quello, che a la Commedia si richiede, anzi più tosto tien de lo Eroico.

¹ Spingarn, *Literary Criticism*, pp. 92-93.

² *Ibid.*, p. 109.

DANIELLO

Daniello, who was also an interpreter of Dante, published a *Poetica* in 1536.¹ He sets forth the traditional definitions and refers apparently to that of the *Poetics*, but not as if they were contradictory or essentially different.² His discussion with regard to the tragic hero is termed "a curious misconception of Aristotle's meaning" by Spingarn,³ but it merely reproduces the traditional treatment of the topic and Spingarn himself discusses the sources of Daniello's views earlier in his book.⁴

LAZARE DE BAÏF

In 1537 there appeared a translation into French of the *Electra* of Sophocles by Lazare de Baïf. The work is prefaced by a definition of tragedy whose relation to the mediaeval expression is obvious.⁵

GIRALDI

In Giraldi Cintio, who wrote in 1543, we have knowledge of both the *Poetics* and the traditional theory.⁶ Spingarn considers his statement of the unity of time as the very first enunciation of this law of the drama.⁷ The traditional element is conspicuous in his view that the actions of tragedy are called illustrious because of the rank of the persons represented.⁸

¹ Bernardino Daniello, *Della Poetica* (Venice, 1536).

² *Ibid.*, pp. 34, 38, 39.

³ Spingarn, *op. cit.*, p. 83.

⁴ *Ibid.*, p. 65.

⁵ Lanson, *op. cit.*, p. 574: "Tragédie est une moralité composée des grandes calamitez, meurtres et adversitez survenus aux nobles et excellents personnages comme Aias qui se occist pour avoir été frustré des armes d'Achille, Œdipus qui se creva les yeux après qu'il fut déclaré comme il avait eu des enfants de sa propre mère, après avoir tué son père."

⁶ G. B. Giraldi, *Discorsi . . . intorno al Comporre de i Romanzi, delle Comedie, e delle Tragedie, e di altre Maniere di Poesie* (Venice, 1554).

⁷ Spingarn, *op. cit.*, p. 91.

⁸ *Ibid.*, p. 62.

There is in the collection of treatises assembled by Gronovius a work on comedy¹ by another Giraldis² and in it both Aristotle and the grammarians are cited, but his interest is in the latter.

PEDEMONTE

Instead of attempting, as Rostagni has recently done, to prove the influence of the *Poetics* on Horace, an earlier writer sensibly explains the differences on a sound historical basis.³

¹ From "Lib. VI De Scena et Poetarum Scaenicorum Historia," in *Historia Poetarum tam Graecorum quam Latinorum Dialogi Decem*, Basel, 1545.

² Jacobus Gronovius, *Thesaurus Graecorum Antiquitatum* (Venice, 1735), VIII., col. 1474: "Lilii Gregorii Gyraldi, Ferrariensis, De Comoedia ejusque Apparatu Omni et Partibus Commentarius: Comoedia est privatae civilisque fortunae sine vitae periculo comprehensio. Graeci itidem sic definiunt: κωμῳδία ἐστὶν ἰδιωτικῶν καὶ πολιτικῶν πραγμάτων ἀκινδυνὸς περιοχὴ. Donatus vero ita: *Comoedia est fabula, diversa instituta continens affectuum civilium ac privatorum, qua discitur quid sit in vita utile, quid contra vitandum*. M. Tullius Comoediam esse ait, *imitationem vitae, speculum consuetudinis, imaginem veritatis*: id quod est visus accepisse a Livio Andronico, qui Comoediam ante Ciceronem esse dixerat *quotidianae vitae speculum*: nec injuria: nam ut intenti speculo veritatis lineamenta facile per imagines colligimus, ita lectione Comoediae imitationem vitae, consuetudinisque non aegerrime animadvertimus. Unde etiam scriptum est, *Comoediam esse poema sub imitatione vitae, atque similitudine compositum*. Aliam tamen definitionem affert Aristoteles, quae & alium habet finem: ita enim ait: *Comoedia est imitatio improbioris quidem, non ad omnem tamen malitiam, sed turpitudinis quaedam est ridicula particula. Ridiculum enim peccatum quoddam est, & turpitudo doloris expers, correptionem minime afferens: veluti ridicula facies, quae statim est turpe quiddam & perversum, sine dolore*. Videtur ex his verbis Philosophus innuere, Comoediam inventam esse ad oblectandos populos: & propterea varia quae tradunt de ejus inventionem recitabo." . . . [The differences between the species are distinguished thus; cols. 1478 ff]: "Nunc quid inter Tragoediam & Comoediam distet, disquiramus. In Comoedia quidem mediocres fortunae hominum, parvi impetus, periculaque, laetique sunt exitus actionum: at in Tragoedia omnia contraria, ingentes personae, magni timores, exitus funesti habentur, & illic turbulenta prima, tranquilla ultima: in Tragoedia contrario ordine res aguntur, tum in Tragoedia fugienda vita, in Comoedia capessenda exprimitur. Postremo omnis Comoedia de fictis argumentis. Tragoedia saepe de historica fide petitur. . . . Sed enim Homerus, qui omnis poeticae largissimus fons est, his carminibus exempla praebuit, & velut quadam suorum operum lege praescripsit, qui *Iliaden* instar Tragoediae, *Odysseam* ad imaginem Comoediae fecisse monstratur."

³ *Francisci Philippi Pedmontii Ecphrasis in Horatii Flacci Artem Poeticam* (Venice, 1546), f. 31 v.: "Et ideo non mirum, si cum Aristotele Flaccus quandoque

ROBORTELLI

The first critical edition of the *Poetics*, together with a commentary on Horace, was that of Robortelli in 1548,¹ and it appeared in the same year as the dictionary of Junius. He translates *κάθαρσις* by *purgans*,² and explains it by reference to the *Politics*.³ The value of tragedy is in the satisfaction which spectators have in seeing that there is no mortal, however highly placed, who is not subject to the greatest calamities. But in the commentary on Horace there is clear evidence of his study of the Roman grammarians.⁴

CAPRIANO

Capriano⁵ seems to be based on the *Poetics*, in the light of the grammarians, and much of what he says shows an advance over some of his predecessors.⁶ His observations on the epic have an interesting parallel in the work of the French critic Pelletier, published in the same year.⁷

non consentit. Quippe ille ab antiqua poesi non discedens artis poeticae normas tradidit; hic autem uates, quod quidem permultam interest, cum maiorum tum iuniorum poemata perpendens quaedam admittit, quaedam uero non probat. Nam & ipse peripateticorum princeps ueterum philosophorum dogmata taxans antiquam philosophiam balbutientem nuncupauit. quod si ab eorum opinione in rebus philosophicis quasi semper dissentire sibi licuit, cur & auctori nostro in poeticis cum ipso semel non conuenire crimini dabitur?"

¹ *Francisci Robortelli Utinensis in Librum Aristotelis de Arte Poetica Explicationes, qui ab eodem Authore ex Manuscriptis Libris, Multis in Locis Emendatus Fuit, ut jam Difficillimus ac Obscurissimus Liber a Nullo ante Declaratus Facile ab Omnibus Posset Intelligi.* [Together with the preceding is]: *Paraphrasis in Librum Horatii qui Vulgo de Arte Poetica ad Pisones Inscribitur; ejusdem Explicationes de Satyra, de Epigrammate, de Comoedia, de Salibus, de Elegia.* (Florence, 1548.) His readings were drawn upon in the edition of the *Poetics* published by E. A. W. Gräfenhan at Leipzig in 1821. References below are to the edition printed at Florence, 1658.

² *In Libr. Arist.*, p. 52.

³ *Ibid.*, pp. 52-53.

⁴ *Ibid.*, p. 42.

⁵ Giovanni Pietro Capriano, *Della Vera Poetica*, Venice, 1555.

⁶ Cf. Spingarn, *op. cit.*, pp. 42-43, 83-84.

⁷ *Ibid.*, p. 211.

PELLETIER

Jacque Pelletier's *Art Poétique* (1555) shares in a moderate way the point of view of the *Pléiade*,¹ and although his work appeared before that of Scaliger, Spingarn surmises that he may have known the great critic or have gone to the same sources. His definitions are the traditional ones,² so that Spingarn's conclusions do not immediately follow as far as Pelletier is concerned,³ for the words of his formula for tragedy might easily have been taken from a mediaeval author.⁴

MINTURNO

Eleven years after the publication of Robortelli's edition, there appeared the work on poetry by Minturno,⁵ which he himself afterwards translated into Italian.⁶ He insists on the appropriate endings of tragedy and comedy, in terms reminiscent of Diomedes, but he appeals to the *Poetics* to establish his point.⁷ His paraphrase of the definition of tragedy is quoted, immediately after a translation into Latin of Aristotle's text, by Vossius, who with Scaliger and Heinsius was among the most powerful critics of the seventeenth and eighteenth centuries.⁸ Minturno's equivalent for *κάθαρσις* appears to be *expiatio*. In the

¹ *Ibid.*, p. 191.

² *Ibid.*, p. 200.

³ *Ibid.* p. 200: "By this time, then, Aristotle's theory of tragedy as restated by the Italians, had become part of French criticism."

⁴ Cf. Tilley, *op. cit.*, p. 98, n. 1: "Au lieu des personnes comiques qui sont de basse condition en la Tragédie s'introduisent Rois, Princes et grands Seigneurs. Et au lieu qu'en la Comedie les choses ont joyeuse issue, en la Tragédie la fin est tousjours luctueuse et lamentable, ou horrible à voir. . . . La comedie parle facilement, et comme nous avons dit, populairement. La tragédie est sublime, capable de grandes matieres."

⁵ *Antonii Sebastiani Minturni De Poeta Libri Sex* (Venice, 1559).

⁶ Antonio Sebastiano Minturno, *L'Arte Poetica* (Venice, 1564).

⁷ *De Poeta*, p. 125.

⁸ In Vossius, *Inst. Poet*, II, xi, 2 (p. 94 of 1696 ed.): "Imitatio insignis, seriaque aliqua, & absoluta, & magnitudine quadam comprehensam actionem oratione suavi exprimens: ita ut ejus partes suo singulae quidem loco, atque seorsum, adhibeantur; nec simplici narratione, sed inductione illorum, qui ita agunt ac dicant, ut miserationem terroremque concitent ad id genus morborum expiationem."

Italian translation by his own hand, he notes explicitly that the ideas of Cicero and of Aristotle in the *Poetics* do not conflict.¹

BERNARDO TASSO

Bernardo Tasso, the father of Torquato, however, relies entirely upon the witness of Cicero and the mediaeval tradition for his definitions.²

SCALIGER

One of the most important of Renaissance scholars and critics, whose dominance of opinion in his own and the following generation can hardly be exaggerated, is Scaliger.³ Of him, Spingarn says: "He was the first to regard Aristotle as the perpetual lawgiver of poetry. He was the first to assume that the duty of the poet is to find out what Aristotle says, and then to obey these precepts without question. He distinctly calls Aristotle the perpetual dictator of all the arts: '*Aristoteles imperator noster, omnium bonarum artium dictator perpetuus.*'"⁴ His effect on French classical drama was decisive. A good deal of Elizabethan criticism also reflects his dicta.⁵

Modern historical criticism, colored by modern philosophy, has been

¹ *L'Arte Poetica*, p. 116.

² Bernardo Tasso, *Ragionamento della poesia* (Venice, 1562), (in *Delle Lettere di M. Bernardo Tasso*, 2 vols., Padua, 1733, pp. 511-538), II, pp. 513 and 515.

³ Julius Caesar Scaliger, *Poetices Libri Septem*. Geneva, 1561; Lyons, 1561; Heidelberg, 1581, 1586, 1607, 1617, et cet. Cf. *Select Translations from Scaliger's Poetics*, translated by F. M. Padelford (*Yale Studies in English*, vol. XXVI), New York, 1905. E. Brinschulte, *J. C. Scaligers Kunsttheoretische Anschauungen*. (Diss., Bonn, 1913); *J. C. Scaligers Kunsttheoretische Anschauungen und deren Hauptquellen* (Bonn, 1914).

⁴ Spingarn, *op. cit.*, p. 141. But cf. Thomas Pope Blount, *Censura Celebriorum Authorum*, London, 1690, p. 570: "Dii Boni! quam multa ille, quam multa vetera, non lecta, non visa, non audita aliis depromit! Daemonium hominis. Lips. epist. Quaest. 1. 3. *epist.* 20." . . . "Literarum omnium Dictator perpetuus, & per omnia Diis magis quam Hominibus comparandus, Josephus Scaliger, Gasp. Sciopp. prae-fat. de Art Crit." . . . "In Criticis omnium recte aestimantium judicio princeps sine controversia, sine aemulo ac rivali dominatur. Baud. orat. in obit. Scalig."

⁵ G. Gregory Smith, *Elizabethan Critical Essays*, I (Oxford, 1904), p. lxxvi, n. 7. Cf. notes on I, 68.25 and 80.7.

prone to regard him as a false prophet or at least a perverse pedant.¹ Until Lanson pointed out the general sources of this energetic critic, both his method and his influence were a mystery. The fact is that Scaliger, in addition to his ideals of scholastic system and formal, legalistic classification, analyzed fully as much the traditional views and their sources as he did Aristotle's *Poetics*, and the popularity of his work on poetry was due to a favorable attitude on the part of his readers and followers toward such a method.

He considers that the *Odyssey* is more truly a tragedy than the *Iliad*.² He criticizes the definition of comedy by the grammarians on the ground that it would include other literature in addition to the drama,³ but his objection that danger is involved even in comedy obviously has reference to the grammarians' expression.⁴

When contrasting tragedy and comedy, however, the points to which he draws attention are precisely those stressed in the traditional formulas, and he utilizes the material provided by Diomedes, even to the anecdote about Euripides and King Archelaus.⁵ And, in general, the

¹ E. Lintilhac, *De J. C. Scaligeri Poeticae* (Thèse), Paris, 1887, is a futile and elaborate discussion of Scaliger's verbal and internal divergence from the *Poetics* of Aristotle.

² *Poet.*, I, v (p. 23, ed. 1617).

³ *Poet.*, I, v (p. 24, ed. 1617).

⁴ Gronovius, *op. cit.*, col. 1498: "De Comoedia illa quoque falsa Grammatici docuere: quia esset poema positum in imitatione, totum in gestu consistere atque pronuntiatione. Profecto nihilominus Comoedia est, etiam quum legitur vel tacitis oculis. Quin gestus recitantium solus est: non omnes qui legunt, recitant. Praeterea nimis jam saepe dictum est, imitationem universae poeseos finem esse. Comoediam igitur sic definiamus nos, poema dramaticum, negotiosum, exitu laetum, stylo populari. Errarunt enim, qui Latinis sic definivere, privatarum personarum, civilium negotiorum comprehensio, sine periculo. Principio aliis quoque fabulis convenit, non dramaticis quae simplici narratione recitari possunt. Deinde in Comoedia semper est periculum, alioquin exitus essent frigidissimi. Quid enim est aliud periculum, quam imminentis mali aditio sive tentatio? Praeterea non solum pericula, sed etiam damna lenonibus, rivalibus, & servis, & heris: quemadmodum in *Asinaria*, & in *Mostellaria*, ipsi quoque heri male mulctantur. Adhaec Praetextatas Comoediae nomine appellare nequeant ex ea definitione: non enim sunt privatae personae. Postremo & Mimis est communis definitio, & Satyrae dramaticae."

⁵ *Ibid.*, col. 1498: "Tragoedia, sicut & Comoedia in exemplis humanae vitae confirmata, tribus ab illa differt, Personarum conditione, fortunarum, negotiorumque qualitate, exitu: quare stylo quoque differat necesse est. In illa e pagis sumpti Chremetes, Davi, Thaides loco humile: Initia turbatiuscula: fines laeti. Sermo

Renaissance theorists were more concerned about tragedy than about comedy, for, as already noted, Aristotle had not discussed comedy with the same detail that he had tragedy, and the difficulties of harmonizing contemporary practice with Aristotle's *Poetics* were consequently greater. Besides, contemporary comedy was more independent of the scholarly critics for its support.

It is noteworthy that Scaliger does not blindly worship the text of Aristotle; he even rejects the philosopher's definition of tragedy in favor of his own, ruling out those technical elements in Aristotle's formula which pertained only to stage presentation in the Athens of his day, and objecting to *κάθαρσις* as irrelevant. His actual words, in his own definition of tragedy, which he expressly prefers to that of the *Poetics*, are simply a return to the formula of the Roman grammarians.¹

GRÉVIN

Grévin in 1562 thought that French drama was already able to display productions perfect according to the rules of Horace and Aristotle, but his theory of tragedy shows faint traces of Aristotle and none of Scaliger.² His theory of comedy goes back to tradition, and he repeats the formula of Cicero.³

de medio sumtus. In Tragoedia Reges, Principes, ex urbibus, arcibus, castris. Principia sedatoria: exitus horribiles. Oratio gravis, culta, a vulgi dictione aversa, tota facies anxiosa, metus, minae, exilia, mortes. Memoriae proditum est, Euripidem ab Archelao rege Macedoniae, cujus in fide, ac clientela esset, rogatum, ut de se Tragoediam scriberet. Ne, inquit ille, Jupiter, ne tantum mali."

¹ *Ibid.*, col. 1499: [After quoting the *Poetics*,] "Quam nolo hic impugnare aliter quam nostram subnectendo. Imitatio per actiones illustris fortunae, exitu infelici, oratione gravi metrica. Nam quod harmoniam & melos addunt, non sunt ea, ut Philosophi loquuntur, de essentia Tragoediae: etenim Tragoedia in scena tantum esset, extra scenam non esset. Quod autem dixit, μέγεθος ἐχούσης, positum est, ad differentiam Epopoeiae, quae aliquando proluxa est. Non tamen semper: cujusmodi vides apud Musaeum. Praeterea κάθαρσις vox neutiquam cuius materiae servit: sicut μέγεθος mediocritatem significat hic. Paucis enim versibus nequit satisfieri populi expectationi: qui eo convenit, ut multorum dierum fastidia, cum aliquot horarum hilaritate commutet. Quemadmodum inepta quoque est prolixitas: adeo ut facete dicas illud Plautinum,

Lumbi sedendo, oculi spectando dolent."

² Spingarn, *op. cit.*, p. 201.

³ Jacques Grévin, *Théâtre Complet*, avec Notice et Notes par Lucien Pinvert (Paris, 1922), p. 7: "Or je reviens à la Comédie, qui est un discours fabuleux, mais

CASTELVETRO

Castelvetro¹ is credited with the first affirmation of the unity of place and with formulating the three unities in their definitive form, the form that was accepted by French classicist critics and playwrights.² His acute remarks on the function of the chorus in ancient drama, presented in his controversy with Pigna, give added reason for distinguishing between tragedy and comedy on the traditional basis.³ He treats

approchant de vérité, contenant en soy diverses manières de vivre entre les citadins de moyen estat, et par lequel on peult apprendre ce qui est utile pour la vie, et au contraire cognoistre ce que lon doit fuir, enseignez par le bonheur ou malheur d'autrui. C'est pouquoy Cicéron l'appelle imitation de vie, mirouer des coustumes, et image de vérité."

¹ Lodovico Castelvetro, *Poetica d'Aristotele, Vulgarizzata et Sposta* (Vienna, 1570); (revised and enlarged, Basel, 1576, 1582, 1678). *Opere Varie . . . Non Più Stampate, colla Vita dell' Autore Scritta dal Sig. Lodovico Antonio Muratori* (Milan and Berne, 1727). Cf. H. B. Charlton, *Castelvetro's Theory of Poetry* (Manchester, 1913). Antonio Fusco, *La Poetica di Lodovico Castelvetro* (Naples, 1904).

² Spingarn, *op. cit.*, pp. 67-68, 100.

³ *Opere Varie*, pp. 81 ff.: "Primieramente adunque nel predetto Libro egli [G.-B. dalla Pigna] vuole, che si creda, che egli sia il trovatore di quella opinione, che la Tragedia non possa aver per soggetto azione procedente dall' ingegno del Poeta, convenendogli di necessità, che sia stata prima ricevuta dal popolo, come manifesta, o per Istoria, o per fame in generale; poichè delle azioni Reali si tiene conto dal mondo, e se ne fanno Istorie, e passano a notizia di tutti, almeno in generale; siccome dall' altra parte la Commedia non può aver per soggetto se non azione tutta imaginatasi dal Poeta, non essendo verisimile, che il grido delle azione Cittadinesche private si rallarghi fra molte persone, e se ne conservi la memoria o per Istoria, o per fama lungo tempo, la quale azione Cittadinesca privata è la materia della Commedia siccome l'azione Reale è la materia della Tragedia. Appresso in difendendo egli Eratosthene, il quale avvisava, siccome me, che la Poesia dovesse solamente dilettere, e non giovare, dalle riprensioni di Strabone produce arditamente in mezzo questa risposta, come sua, che posto che la Poesia possa alcuna volta giovare, si può nondimeno sicuramente dire, cha punto non giovi, non giovando mai se non per accidente, e procedendo il giovamento più tosto di fuori, e dall' acutezza del leggente, che dentro dalla Poesia, e dall' intenzione del Poeta. Ultimamente senza punto arrossare, rende la verace ragione, come trovata da lui, perchè il Coro, quantunque sia costituito di persone popolari & vili, non convenga alla Commedia rappresentanti popolari, & i vili, come fa alla Tragedia rappresentanti Signori & i Nobili, la quale è così fatta: Non può il giudizio del Popolo tutto, il quale è soggetto del ragionamento del Coro, aver luogo se non nelle azioni

the definitions of tragedy as primarily a defense against Plato,¹ and he says Cicero's remarks on laughter prove that he never read the *Poetics*.² He also holds that the text of the *Poetics* does not give sufficient grounds for believing in the previous existence of a second book, now lost.³ He refers to Donatus for data on the costume of the comic actors.⁴

Reali, le quali di parte in parte, mentre che si fanno, non che tutte, poichè sono fornite, si divulgano tra Sudditi riguardanti, consideranti, e giudicanti i detti, & i fatti de' lor Signori: là dove le azioni Cittadinesche private pervengono a gli orecchi di pochi, nè sono subito sapute, nè danno da pensare, e da ragionare a tutto il populo o facendosi, o ancora poichè son fatte. ”

¹ *Poetica*, 1570, f. 64 v. ff. (At the end of the book Castelvetro asks the reader to pardon the many typographical errors in the book due to the fact that the German printers did not know Italian.)

² *Ibid.*, f. 51 r. ff.: “Ma con tutto che la materia pertenente a riso fosse, sì come io m’imagino distesa da Aristotele ne libri poetici, non dimeno Cicerone non la lesse mai, perciocche se l’hauesse letta, non direbbe sotto persona altrui, che i libri di questo soggetto liquali haueua veduto dessero piuttosto materia da ridere che insegnassero certa dottrina di riso, conciosia cosa che gli insegnamenti d’Aristotele per isciocchezza non dienno da ridere, ma per sottilità rendano altrui stupefatto.”

³ *Ibid.*, f. 61 v.-62 r.: “Ha detto Aristotele infino a qual termine l’epopea habbia fatta compagnia alla tragedia, & quale forma le habbia data, hora restaua a parlare infino a qual termine l’epopea habbia fatta compagnia alla comedia, & quale forma le habbia data perciocche haueua detto che il Margite, il quale poema senza dubbio era epopeico haueua date le figure alla comedia. Ma egli promette di parlar poi di questo. La qual parte manca, & perauentura in questo volume non se scrisse mai nulla. Ma perche alcuni adducono questo luogo a prouare che Aristotele promette di parlare della comedia, cio è dalla sua natura & di tutto cio che le appartiene come fara della tragedia, la qual promessa vogliono che habbia attenuta nel secondo libro che s’imaginano essere perduto per ingiuria di tempo, è da sapere che Aristotele non promette qui di parlare della comedia se non in quanto ha riceuuta forma dell’epopea nella guisa che in questa particella ha parlato della tragedia non ragionando se non di quello che ella ha riceuuto dall’epopea. Hora io non tralasciero di dire che alcuna volta ho sospettato che questo testo nella voce *κωμωδίας* non sia cambiato volendo hauere *τραγωδίας*, perciocche è assai verisimile che parendo ad Aristotele per la conclusione generale che haueua posta che le cose che ha l’epopea si truouano nella tragedia, & che tutte le cose che ha la tragedia non si trouano nell’epopea si douesse a raccontare particolarmente le cose che ha l’epopea di meno che ha la tragedia, & le cose che ha la tragedia di piu che l’epopea dica che non voglia dire al presente, ma che dira poi luogo piu conuenueuole & per poco necessario quando si questionera quale tra l’epopea o la tragedia sia di antiporre.”

⁴ *Ibid.*, p. 56 v.

JEAN DE LA TAILLE

Jean de la Taille in 1572 first distinctly formulated the doctrine of the unities in France, deriving the principle from Castelvetro.¹ His *Art de Tragédie* appeared as a preface to his *Saül le Furieux*, and he emphasized form as against the irregularity of the moralities.² He esteems tragedy as being different in tone from such plays, in terms derived from Seneca,³ but he objects to the grammarians' formula, in order to admit Biblical themes into tragedy,⁴ and he looks to the naturalization of classic drama in France.⁵

DENORES

Iason Denores, who had commented on Horace⁶ in 1553, was apparently among the first to repeat the methods adopted some centuries before him, by the compilers whose work is seen in the *Tractatus Coislinianus*. Lacking a definition of comedy in the *Poetics* to parallel that of tragedy, he constructs a mechanical definition in the same pat-

¹ Spingarn, *op. cit.*, p. 206.

² *Ibid.*, p. 202.

³ A. Werner, *Jean de la Taille und sein Saül le Furieux* (Leipzig, 1908), p. 10: "La Tragedie donc est vne espece, et vn genre de Poësie non vulgaire, mais autant elegant, beau et excellent qu'il est possible. Son vray subiect ne traicte que de piteuses ruines des grands Seigneurs, que des inconstances de Fortune, que bannissements, guerres, pestes, famines, captiuitez, execrables cruautez des Tyans: et bref, que larmes et miseres extremes, et non point de choses qui arriuent tous les iours naturellement et par raison commune *et. cet.*"

⁴ *Ibid.*, p. 11: "Quant à ceulx qui disent qu'il fault qu'une Tragedie soit tousiours ioyeuse au commencement et triste à la fin, et vne Comedie (qui luy est semblable quant à l'art et disposition, et non du subiect) soit au rebours, ie leur aduise que cela n'aduient pas tousiours, pour la diuersité des subiects et bastiments de chascun de ces deux poëmes."

⁵ *Ibid.*, p. 12: "Et voudrois bien qu'on eust banny de France telles ameres espiceries qui gastent le goust de nostre langue, et qu'au lieu on y eust adopté et naturalisé la vraye Tragedie et Comedie, qui n'y sont point encor à grand' peine paruenues, et qui toutefois auroient aussi bonne grace en nostre langue Françoisse qu'en la Grecque et Latine."

⁶ Iason Denores, *In Epistolam Q. Horatii Flacci de Arte Poetica . . . Interpretatio* (Venice, 1553).

tern as his expansion of the definition of tragedy,¹ introducing elements from various sources.²

DEL RIO

One of Scaliger's bitterest opponents, Martin Antonio del Rio, agreed with him nevertheless in the theory of tragedy and comedy; he published a large work on Latin tragedy, in which he cites various standard authorities.³ On tragedy he quotes Theophrastus, Scaliger, Minturno, and Aristotle, translating the *καθαρσις* clause of Aristotle in a medicinal sense.⁴ In defining comedy he reproduces Diomedes, and accepts his distinctions between the two species. He expressly claims that Diomedes does not conflict with Aristotle, and he also quotes the anecdote about Euripides and Archelaus.⁵

¹ *Poetica di Iason Denores. Nella qual per Via di Definitione, & Diuisione si Tratta Secondo l'Opinione d'Aristotele della Tragedia, del Poema Heroico, & della Comedia* (Padua, 1588), f. 6 r.: "E dunque la Tragedia imitation per rappresentation di una attion marauigliosa, compita, & conueneuolmente grande di persone Illustri, mezzane fra buone, & cattive negli errori humani per qualche horribilità, che cominciando da allegrezza finisce in infelicità nello spacio di vn giro di Sole, composta con parole altiere, & graui, & con uersi sciolti endecasillabi; ò per il piu de sette, & di cinque silabe; ò con ambidue mescolatamente, & ne' chori con canzoni, & con madrigali, per purgar gli spettatori col diletto, che nasce dalla imitatione, & dalla rappresentatione dal terrore, & dalla misericordia, & per fargli abhorrir la uita de' tiranni & de' piu potenti."

² *Ibid.*, F 117 r.: "E dunque la Comedia imitation per rappresentation di una attion marauigliosa, compita, & conueneuolmente grande di persone priuate, mezzane fra buone, & cattive negli errori humani per qualche sempietà, che principiando da trauaglio finisce in riso, & in allegrezza nello spacio di un giro di Sole, composta con parole humili, & con uersi corti di sette, & di cinque sillabe, per purgar gli spettatori col diletto, che nasce dalla imitatione, & dalla rappresentatione, da quelle passioni, & discontentezze, che turbano la lor quiete, & tranquillità, per gl' innamoramenti della mogli, delle figliole, de' figlioli, per gl' inganni, & tradimenti de' seruitori, de' ruffiani, delle nutrici, & di altre persone simili, & per fargli innamorar della uita priuata a conseruation di quella tal ben regolata Republica popolare, nella quale si troueranno."

³ *Martini Antonii Delrii Syntagma Tragoediae Latinae* (2 vols., Antwerp, 1593).

⁴ *Ibid.*, I, pp. 1-2.

⁵ *Ibid.*, I, p. 5.

VAUQUELIN DE LA FRESNAYE

Vauquelin de la Fresnaye, the theorist of the Pléiade, relies eventually on the *Poetics* for his definition of tragedy,¹ but his statement of comedy is illustrated with original themes, while depending on the grammarians.²

ACADEMY OF GIESSEN

A *Poetics* compiled by certain professors of Giessen, which reached its third edition in 1617, relies upon Diomedes and Cicero for its understanding of comedy,³ for tragedy upon Diomedes and Scaliger,⁴ with interesting local references in the discussion of the persons of comedy.⁵

CERVANTES

One of the most interesting references of the period to a theory of comedy, to be found in the literature which is not exclusively critical, is that in *Don Quixote* where the Curate digresses, while inveighing against books of chivalry, to attack Spanish comedy on the grounds of

¹ Georges Pellissier, *Vauquelin de la Fresnaye, L'Art Poétique* (Paris, 1885), pp. 133-134 (I, 153 ff.):

Mais le suiet Tragic est vn fait imité
De chose iuste et grave, en ses vers limité,
Auquel on y doit voir de l'affreux, du terrible,
Vn fait non attendu, qui tienne de l'horrible,
Du pitoyable aussi.

² *Ibid.*, l. 143:

La comédie est donc vne Contrefaisance
D'un fait qu'on tient meschant par la commune vsance,
Mais non pas si meschant qu'a sa meschanceté
Vn remede ne puisse estre bien aporté:
Comme quand vn garçon, vne fille a rauie
On peut en l'espousant luy racheter la vie.

³ *Poetica per Academiae Gessinae Nonnullos Professores* (3d ed., Giessae Hassorum, 1617), p. 331.

⁴ *Ibid.*, p. 335.

⁵ *Ibid.*, pp. 337-338.

its lack of unity and plausibility. In contrast, the definition of Cicero and the correctness of foreign writers are cited.¹

LOPE DE VEGA

Lope de Vega wrote an apology for the unclassic drama of Spain, and his *Arte Nuevo de Hacer Comedias en Este Tiempo*² defends his own practice and that of other writers of the time. In his essay he refers to the Ciceronian definition,³ and advises the reader who wishes to know the rules to study Robortelli.⁴ His essay concludes with a versified loose paraphrase of part of the traditional formula.⁵ The grammarians' definitions could thus include Spanish comedy of the Golden Age.

HEINSIUS

The brief treatise of Daniel Heinsius, the pupil of Joseph Scaliger, *De Tragoediae Constitutione*, appeared in 1610;⁶ because of its authority and conciseness it was termed by Chapelain, "the quintessence of Aristotle's *Poetics*." It was accepted as an authority by Racine and Corneille; it was really through this work that the influence of the teacher's father was dominant in France,⁷ and even penetrated into England, affecting Ben Jonson and Dryden. Heinsius seems to have anticipated Bernays in considering the Pythagoreans and Neo-Platonists in relation to the controversy over *κάθαρσις*,⁸ and on the tragic hero he invokes scholastic ethics.⁹ So much of his material is reproduced by Vossius that it need not be discussed extensively here.

¹ Miguel Cervantes de Saavedra, *El Ingenioso Hidalgo Don Quixote de la Mancha* (Madrid, 1608). Chapter xlviii (Part IV), f. 255 r.

² Translated by William T. Brewster in the *Papers on Play-Making*, Vol. I, with an introduction by Brander Mathews (Dramatic Museum of Columbia University, New York, 1914). Reprinted in Clark, *European Theories*, pp. 89 ff.

³ Sec. 11 (Clark, *op. cit.*, p. 90).

⁴ Sec. 13 (Clark, *op. cit.*, p. 91).

⁵ Sec. 28 (Clark, *op. cit.*, p. 93).

⁶ *Aristotelis de Poetica Liber* (Leyden, 1610 and 1611; Paris, 1625 and 1645). *De Tragoediae Constitutione* (Leyden, 1643). Cf. Racine's marginal notes on the last-named work in Racine, *Œuvres*, ed. Paul Mesnard, VI (Paris, 1865), pp. 288-290.

⁷ Spingarn, *op. cit.*, p. 245.

⁸ *De Tragoediae Const.*, p. 10 (1643 ed.).

⁹ *Ibid.*, p. 76 (1643 ed.).

VOSSIUS

Vossius was the most indefatigable in his collection of material bearing on tragedy and comedy.¹ He may properly be considered the best, as he is the most comprehensive, single authority for study as a representative Renaissance theorist and scholar. He compiles and codifies all the data he could find in classical literature and the critical work of the preceding century.² At the head of one section he writes *Methodus Scribendae Tragoediae*,³ which might well have been used as a general title for most of the Renaissance poetic treatises we have been considering, if not for the *Poetics* of Aristotle himself. Before giving Aristotle's definition of tragedy from the *Poetics*, he gives his own, in which he admits purgation if desired, but does not insist on it.⁴ After translating the definition of tragedy from the philosopher, he cites Scaliger, but disagrees with him on the necessity for the unhappy ending, and he offers an ingenious explanation for the spectators' happiness in witnessing unhappiness.⁵ He quotes Theophrastus's and Diomedes's definitions

¹ Cf. Sandys, *op. cit.*, II, pp. 307-309.

² *Gerardi Joannis Vossii, De Artis Poeticae Natura ac Constitutione Liber* (Amsterdam, 1647). *Poeticarum Institutionum Libri Tres* (Amsterdam, 1647); *Tractatus Philologici de Rhetorica, de Poetica, de Artium et Scientiarum Natura ac Constitutione* (Amsterdam, 1697).

³ *Poet. Inst.*, II, xviii. Cf. also: *Compendium Artis Poeticae Aristotelis ad Usus Conficiendorum Poematum*, Ab Antonio Riccobono Ordinatam, & quibusdam Scholiis Explanatum (Patavii, 1591).

⁴ *Ibid.*, II, xi, 2: "Tragoedia est poema dramaticum, illustrem fortunam, sed infelicem, gravi et severa oratione imitans. Quibus et finem hunc, si voles, adde: ad affectus ciendos, animumque ab iis purgandum."

⁵ *Ibid.*, II, xi, 2: "Per haec vero tragoedia *περὶ αὐτῶν τῶν τε τοιοῦτων παθημάτων κάθαρσιν*, *purgare*, ac *levare animum ab huiusmodi perturbationibus*. Quale est quod (ut unam e multiplici purgatione affectuum memorem) homines videntes adversa, in quibus jam olim inciderint magnae animae, facilius discunt ferre praesentia. Qua de re elegantes Timoclis versiculos legere est apud Athenaeum initio libri sexti.

"Julio Scaligero lib. 1, de re Poëtica cap. vi. definitur, imitatio illustris fortunae, exitu infelici, oratione gravi metrica. Ubi illud probare non possum, quod requirat exitum infelicem. Plurimum quidem id sit; sed non est de *ὀύσις* tragoediae. In multis enim id Graecorum tragoediis non videas; ut postea dicetur. Quare differentia *εἰδοποιός*, qua differt a comoedia, in eo consistit, quod graves actiones imitatur, eoque graves etiam personas assumit. Sed, utcumque non semper exitus sit

of tragedy, as if not contented to rely on the *Poetics* alone.¹ In another place, however, he rates the happy ending in tragedy as a concession to the mob.² He presents various definitions of comedy, but defends Diomedes against Scaliger, whose formula he also reproduces.³ Diomedes and Donatus are both given on the differences between tragedy and

infelix; semper tamen infelix conditio, vel grave periculum, ob oculos ponitur. Nam affectus ei movere propositum est, in primis misericordiam.

“Quaerat aliquis, quomodo delectationem, quae poëtae omni est proposita, adferre tragicus possit, cum tristia et luctuosa repraesentet: nec viri boni sit gaudere alienis malis, praesertim virorum illustrium. Huic difficultati occurritur, si cogitemus, spectatorem capere voluptatem, non ex eo, quia aliis fuerit male: verum ex artificio poëtae: quomodo exhorrescimus conspectum draconum, & monstrorum: at jucunda est eorum pictura, quia pictoris nos ars delectat. Etiam alterum hic concurrit. Nam suave est nosse casus tantos, quia haec res prudentiam auget.”

¹ *Ibid.*, II, xiii, 10: “Trahitur argumentum tragicum ex calamitatibus atrocibus, quae heroibus, & regibus, accidere. Ut duo hic spectare oporteat; personas, & res. Personae sunt illustres; ut heroës, & reges.

“Unde tragoedia a Theophrasto dicebatur esse *ἡρωικῆς τύχης περιστάσις*, ut apud Diomedem legere est lib. III. Cui ea itidem definitur heroicae fortunae in adversis comprehensio. Ac similiter Etymologici magni auctori describitur, *βίων τε, καὶ λόγων ἡρωικῶν μίμησις*. Sed Calamitatum hic nulla est mentio: quod fit in illa Diomedis. Quas etiam expressit Elias Cretensis in Nazianzeni orat. XXIII: *Tragoedias*, inquit, *veteres appellabant, quae ob gravissimas calamitates canebantur: quemadmodum contra comoedias eas, quae ridicula argumenta continebant*. Rarius est, ut atroces illae calamitates in heroum domos incidant: quae et caussa est, cur pauca olim tragoediarum fuerint argumenta.”

² *Ibid.*, II, xiii, 31: “Neque, si exitus sit laetus, eo nomen tragoediae amittitur: quia non est de *οὔσια* ejus, ut exitus sit tristis. Alioqui minor pars tragoediarum Euripidis, quae quidem hodie exstent, tragoediae esse desinerent. Quare, . . . satis est, si facies ejus sit luctuosa & anxiosa, ita ut in atroci, & ancipite illustrium personarum fortuna, natura tragoediae clare eluceat.

“Non tamen negaro, tragoedias ejusmodi aliquid ex natura comoediae trahere. Natura enim tragoediae est luctuosa; quod negari nequit; cum terror, et misericordia, ei inprimis proponantur. Aliter cum fit, datur aliquid, ut diximus populi voluptati. Unde Aristoteles ait, a poetis fieri id *διὰ τὴν τῶν θεάτρων ἀσθένειαν*, hoc est, *ob infirmum, et imbecille eorum judicium, qui in theatro spectant*. Sed populus varius est, & inconstans: nunc hoc probat, nunc illud: eoque satius erit, si naturam tragoediae retineamus penitus; nec, nisi gravis caussa justerit, ab ea recedamus.”

³ *Ibid.*, II, xxii: “De Comoedia; ac primum de vocabulo, definitione, discrimine ejus a tragoedia, ac fine. . . .

“Comoedia est poëma dramaticum, ciuium, ac vulgi actiones stylo populari

comedy, but Vossius decides that the only thing that really matters is the prevailing mood.¹

CORNEILLE

The influence of Heinsius and Renaissance scholarly criticism is to be seen not only in Racine, as noted above, but also in Corneille,² who

imitans, non sine salibus, ac jocis. Quod si rationem habeamus Comoediae, quae obtinet: dicere possis, imitari actiones non civiles modo, sed etiam privatas.

"Comoedia a Graecis ita definitur, ut Diomedes, et Donatus, referunt: *Κωμῳδία ἐστὶν ἰδιωτικῶν πραγμάτων ἀκίνδυνος περιοχή*. Quorum mentem ita expressit Diomedes: *Comoedia est privatae, civilisque fortunae, sine periculo vitae, comprehensio*. Ea in definitione duo scrupulum injiciunt. Unum est, quod dicitur comoedia esse *ἀκίνδυνος*. Sed eo spectarunt, quod, utcumque periclitentur amantes, et similes; tamen illud leve sit. Non enim de vita agitur; sed solum, an amica excidant, vel re simili. Accedit, quod in catastrophe omnem illam curam sequitur securitas. Praeterea culpatur, quod comoedia dicatur esse *πραγμάτων ἰδιωτικῶν*: hoc est, ut Diomedes ait, *privatae civilisque fortunae*. Atque ejus sententiam est Donatus, seu Euanthius; cui *Comoedia est fabula, diversa instituta continens, affectuumque civilium, ac privatarum rerum; qua discitur, quid sit in vita utile, quid contra evitandum*. Sed Julio Scaligero, quia omnis comoediae habere rationem voluit, placuit utrumque omittere. Ut cui definiatur (Lib. I. de poet. cap. 5) *poëma dramaticum, negotiosum, exitu laetum, stylo populari*."

¹ *Ibid.*, II, xxii, 4: "De discrimine hoc comoediae, et tragoediae, Diomedes scribit his verbis: *Tragoedia introducuntur duces, heroës, reges: in Comoedia humiles, atque privatae personae. In illa luctus, exsilia, caedes: in hac amores, virginum raptus. In illa frequenter, et pene semper, laetis rebus exitus tristes, et liberorum, fortunarumque priorum, in peius agnitio: in hac tristibus laetiora succedunt. Quare varia definitione discretæ sunt. Altera enim ἀκίνδυνος περιοχή: altera ἡρωϊκῆς τύχης περιστάσις dicta*. Donatus, sive Eugraphius, de eodem hoc pacto: *In comoedia mediocres fortunae hominum, parvi impetus, periculaque, laetique sunt exitus actionum. At in tragoedia omnia contraria; ingentes personae, magni timores, exitus funesti habentur. Et illic turbulenta prima, tranquilla ultima. In tragoedia contrario ordine res aguntur. Tum quod in tragoedia fugienda vita, in comoedia capessenda exprimitur. Postremo, quod omnis comoedia de fictis est argumentis: tragoedia saepe ab historica fide petitur*.

"Verum ex multiplici hoc discrimine illud inprimis attendere oportet, quod essentialiale est, ac quod idcirco in tragoediae definitione Aristoteles exprimendum putarit. Quale est, quod tragoedia contineat gravem personae gravis actionem, in qua terror ac misericordia; Comoedia vero personae levioris habeat actionem levem, ac subinde ridiculam. Caetera discrimina perpetua non sunt; quale illud, quod ab exitu petitur."

² P. Corneille, *Œuvres*, XII (Paris, 1824), p. 26. Jules Lemaitre (*Corneille et la Poétique d'Aristote*, Paris, 1888) devoted a small volume to a superfluous task.

distinguished between the two species in accordance with the theories of the Roman grammarians.¹

RAPIN

Rapin was an influential critic whose work was translated into English in the same year that it appeared in France.² He explains purgation as the regulation of pride and hardness by pity and fear,³ and he also

¹ E. F. Jourdain, *An Introduction to the French Classical Drama* (Oxford, 1912), notes the discrepancy between Corneille and Aristotle, but ignores the whole historical development of theory when she says (pp. 12-13): "The broad distinction between tragedy and comedy was perhaps this. In the thought of the seventeenth century tragedy dealt with ideal conditions, which might be foreign or ancient, and much symbolism was used in its expression on the stage. Comedy, on the other hand, was intended to be a picture of real life; and it is interesting to see the transition of thought from one to the other. For instance, the ideas of personal and political liberty, of honour and duty, are seen in their ideal aspects in the tragedies of Corneille. In the comedies we see the same ideas struggling for expression in faulty natures and everyday surroundings." The distortion of values and misinterpretation of classical theory and practice in her work are clearly due to the influence of Brunetière, whom she cites (pp. 18-19): "The problems presented in seventeenth century French drama may all be described as problems of the will in relation to reason and action. . . . And it was his observation of seventeenth-century drama that led Brunetière to formulate his Law of the Drama, by which this *genre* can be distinguished from the epic or novel."

² René Rapin, *Réflexions sur la Poétique d'Aristote, et sur les Ouvrages des Poètes Anciens et Modernes* (Paris, 1674); Thomas Rymer, *Reflections on Aristotle's Treatise of Poesie, Containing the Necessary, Rational, and Universal Rules for Epick, Dramatick, and other Sorts of Poetry. . . . by R. Rapin* (London, 1674).

³ The ethical value of drama was, however, seriously questioned, as for instance, in C. Desprez de Boissy, *Lettres sur les Spectacles; avec une Histoire des Ouvrages pour et contre les Théâtres* (2 vols., 6th ed., Paris, 1777), II, p. 12: "Le Théâtre comique ne devint pas moins nuisible aux mœurs que le tragique. On en fit un recueil de stratagèmes, pour faire réussir tous les crimes, favoriser toutes les passions, ménager toutes les intrigues, traverser tous les peres, maris, maîtres, exciter l'amour du libertinage, & le faciliter par le jeu infame des valets, des soubrettes & des confidens, qui furent toujours dans la Comédie les rôles les plus intéressans. *Ibid.*, I, p. 94: "Je n'ai jamais entendu, dit M. de Fontenelle à ce sujet, la purgation des passions par le moyen des passions mêmes." *Ibid.*, p. II, 385 (quoting Saint-Evremond): "C'est inutilement qu'on y opposeroit la Doctrine la plus sainte, les actions les plus chrétiennes, & les vérités les plus utiles pour produire cette purgation qu' *Aristote* avoit eu la simplicité d'admettre comme un remede propre à arrêter les mauvaises impressions des Poèmes Dramatiques. Ce Rhéteur Philosophe est à cet égard en défaut; car y a-t-il rien de si ridicule que de se former une science

ascribes a similar moral effect to comedy, citing Cicero.¹ The popularity of Rapin and Rymer continued in England for many years, so that this work is one of the chief sources for the ethical interpretation of purgation in tragedy² and a moralistic analysis of comedy.³

DACIER

Another French critic, André Dacier,⁴ attacks Corneille for permitting the introduction of royalty into comedy and considers tragi-

qui donne sûrement une maladie qui travaille incertainement à la guérison d'une autre? y a-t-il rien de si ridicule que de mettre la perturbation dans une ame pour tâcher après de la calmer par des réflexions qu'on lui fait faire sur le honteux état où on l'a mise?"

¹ Rapin, *Œuvres* II, (Amsterdam, 1709), xxv, p. 173.

² Basil Kennet, *The Whole Critical Works of Monr. Rapin* (3d. ed., 2 vols., London, 1731). [Preface is dated 1705.] New title, II, p. 107: *His Reflections on Aristotle's Treatise of Poesy; with a large Preface by Mr. Rymer*, Chapter xvii (pp. 204-205): "Tragedy, of all Parts of Poesy, is that which Aristotle has most discuss'd; and where he appears most exact. He alledges that Tragedy is a publick Lecture, without comparison more instructive than Philosophy; because it teaches the Mind by the Sense, and rectifies the Passions by the Passions themselves, calming by their Emotions, the Troubles they excite in the Heart. The Philosopher had observ'd two important Faults in Man to be regulated, Pride and Hardness of Heart, and he found, for both Vices, a Cure in Tragedy. For it makes Man modest, by representing the great Masters of the Earth humbled; and it makes him tender and merciful, by shewing him on the Theatre the strange Accidents of Life, and the unforeseen Disgraces to which the most important Persons are subject. But because Man is naturally timorous and compassionate, he may fall into another Extreme, to be either too fearful, or too full of Pity; the too much Fear may shake the Constancy of Mind, and the too great Compassion may enfeeble the Equity. 'Tis the Business of Tragedy to regulate these two Weaknesses; it prepares and arms him against Disgraces, by shewing them so frequent in the most considerable Persons; and he shall cease to fear ordinary Accidents, when he sees such extraordinary happen to the highest Part of Mankind. But as the End of Tragedy is to teach Men not to fear too weakly the common Misfortunes, and manage their Fear; it makes account also to teach them to spare their Compassion, for Objects that deserve it not."

³ Chapter xxv (p. 219): "Comedy is an image of common Life; its End is to shew, on the Stage, the Faults of Particulars, in order to amend the Faults of the Publick, and to correct the People thro' a Fear of being render'd ridiculous. So that which is most proper to excite Laughter, is that which is most essential to Comedy."

⁴ André Dacier, *La Poétique d'Aristote, Contenant les Règles les Plus Exactes pour Juger du Poëme Héroïque, et des Pièces de Théâtre, la Tragédie et la Comédie*, Tra-

comedy as really comedy.¹ In his exposition of the definition of tragedy in the *Poetics*, he stresses the formal elements and neglects purgation.² He wisely remarks later that the extirpation of pity and terror, desired by the Academics and Stoics, is beyond the capacity of tragedy, but he agrees with the Peripatetics that it is not the presence of these emotions in the soul that is evil, but their excess, so that the drama may seek to reduce them to proper proportions and moderate them. The moral benefit is derived from the sympathy of the spectator with the subjects represented and an increased ability to face calamities with a reasonable estimate of their importance. To support this view he quotes Marcus Aurelius.³

LUZÁN

Luzán, writing in Spain in the eighteenth century, after giving the definition of tragedy from the *Poetics*, undertakes to give one of his own, but he holds that its moral effect is restricted, in the main, to royalty.⁴ But comedy deals with common life and is of general benefit.⁵

duite en François avec des Remarques Critiques (Paris, 1692, 1698; Amsterdam, 1692, 1717, 1733).

¹ *Poétique* (1692), p. 60: "Quand Plaute fit son *Amphitryon*, où il introduit des Roys & des Dieux, il l'appella en plaisantant *Tragicocomédie*, mais c'est pourtant une véritable Comédie, où il tourne en ridicule un sujet tragique, & voila de quelle manière seulement la Comédie peut prendre ses sujets dans les actions des Roys et des Heros. Le ridicule doit toujours être le caractere de ce Poëme, et une marque certaine, que c'est la Nature même qui a fait ce partage, c'est que toutes nos pieces qui sont conformes à cette définition, réussissent toujours mieux que les autres que nous ne voyons jamais sur nos théâtres qu'avec un ennui mortel."

² *Ibid.*, p. 72.

³ *Ibid.*, p. 81.

⁴ Ignacio de Luzán, *La Poetica ó Reglas de la Poesia* (1st ed. Saragossa, 1737) (2 vols., Madrid, 1789), II, p. 77: "En tanto, en gracia de los que no entendieren bien la definicion de Aristóteles, que es algo obscura, seame permitido proponer aqui otra mas clara á mi entender, y mas inteligible, como asimismo mas adaptada á los dramas modernos. Pareceme pues que se podria decir 'que la Tragedia es una representacion dramática de una grande mudanza de fortuna acaecida á Reyes, Principes y personajes de gran calidad y dignidad, cuyas caídas, muertes, desgracias y peligros exciten terror y compasion en los ánimos del auditorio, y los curen y purgen de estas y otras pasiones, sirviendo de exemplo y escarmiento á todos, pero especialmente á los Reyes, y á las personas de mayor autoridad y poder.'"

⁵ *Ibid.*, p. 225 "La Comedia, pues, á mi parecer, como quiera que otros la definan, es una representacion dramática de un hecho particular, y de un enredo de poca im-

GONZÁLEZ DE SALAS

González de Salas, another Spanish author of the same period, explicitly declares that he relies mainly on Heinsius.¹

LE JAY

In the Jesuit manuals of studies, the traditional definitions are continued down through the nineteenth century. The definition of tragedy from the *Poetics* is given for the sake of its ethical interpretation,² and the distinctions between the species are established in the manner of the Roman grammarians.³

portancia para el público, el qual hecho ó enredo se finja haber sucedido entre personas particulares ó plebeyas con fin alegre y regocijado: y que todo sea dirigido á utilidad y entretenimiento del auditorio, inspirando insensiblemente amor á la virtud y aversion al vicio, por medio de lo amable y feliz de aquella, y de lo ridículo é infeliz de esto."

¹ Jusepe Antonio González de Salas (*Nueva Idea de la Tragedia Antigua o Ilustracion Ultima al libro singular De Poetica de Aristoteles Stagirita*, Madrid, 1633), p. 9, note 4, cites Aristotle, "Caput 4. Edit. Heinsii, 'quam perpetuo sequimur.'"

² P. G. F. Le Jay, e Societate Jesu., *Bibliothecam Rhetorum Praecepta et Exempla complectentem, quae ad oratoriam et poeticam facultatem pertinent*, et cet., ed. J. A. Amar (Paris, 1809) II, p. 31: *Tragoedia definitur ab Aristotele (Poet. c. 6). . .* "Denique, per misericordiam ac metum animum purgat ac levat ab ejusmodi perturbationibus. Designatum hic habes Tragoediae finem, quae res atroces exhibendas suscipit, ut pravis animorum motibus medeatur. . ." *Ibid.*, II, p. 46: "Haec porro dum subjicit oculis gravissimas calamitates, in quas illustres viri, errore lapsi potius quam culpa sua, incidere, misericordiam et metum naturaliter in nobis excitat, eosdemque interim reprimat motus et coercent. Docet enim non modo ferre praesentia, quae leviora sunt gravibus malis quorum miserescimus, sed animum praeparat ad similes casus, si forte contigerint, constanter tolerandos."

³ *Ibid.*, p. 51: "Dicitur primo Imitatio actionis communis, per quod Comoedia a Tragoedia distinguitur: neque enim imitatur res illustres ac terribiles, ut Tragoedia, neque admirabiles ac prodigiosas; non luctus, non exilia, non caedes, sed civiles et privatas actiones, ut Juvenum curas, avaritiam Senum, fraudes Servorum; et similes, quae alios sollicitudine, alios laetitia afficiant. Neque etiam Principes, Reges, Heroas, sed tenuiores atque humiles personas in scenam inducit.

"Dicitur secundo repraesentare vitae privatae imaginem non sine salibus et jocis, qua in re multum etiam differt a Tragoedia. Haec enim gravissimas animorum perturbationes, quales sunt misericordia ac metus, movet: illa sectatur unam oblec-

ATTACKS ON THE THEATRE

An attack against the theatre as a public institution with a bad effect on public morals was made by the early Christian fathers in the third and fourth centuries. Again in the sixteenth and the seventeenth century,¹ throughout Europe,² theatrical productions, especially comedies, were condemned. Together with the opposition to the stage, in the latter period, there was wide opposition to the continued use of certain classical texts in educational circles.³ Comedies were easily disapproved as fit reading for the young, but even tragedies were denounced.⁴ This feeling was not confined to the Puritans in England,

tationem, quam ridendo parit. Denique Comoediae finis est humanos mores nosse, describere, et describendo corrigere, ne, quod in illis vitiosum est, privatorum hominum familiis nocere possit. Tragoedia etsi hoc proponit sibi pariter, ut mores instituat, tamen nec eadem id perficit via, nec mediae tantum conditiones homines respicit, sed ad ipsos etiam Principes ac Reges assurgit."

¹ Cf. J. D. Wilson, "The Puritan Attack Upon the Stage," in *The Cambridge History of English Literature*, VI (1910), Part II, pp. 421 ff.

² Cf. in addition to the bibliography in Wilson, *op. cit.*; Emilio Cotarelo y Mori, *Bibliografía de las Controversias sobre la Licitud del Teatro en España* (Madrid, 1904), (739 pages, 213 authorities cited; pp. 619 ff., report legislation against theatre from year 1534 to date of publication).

³ Cf. Franz Freiherr von Lipperheide, *Spruchwörterbuch*, (Berlin, 1907), P. 461, s. v. Komödien: "— Und Christen sollen Comödien nicht ganz und gar fliehen, darum, dass bisweilen grobe Zoten und Buhlerei darinnen seien, da man doch um derselben willen auch die Bibel nicht dürfte lesen. (Dr. Martin Luther, Tischreden oder Colloquia (1566). Nr. 68. Tischreden u. Studien. 2. B. Comödien.)" The question is referred to in Thomas Crenius (pseudonym of Thos. Theo. Crusius), *De Philologia, Studiis Liberalis doctrinae, informatione et educatione Litteraria generosorum adolescentum*, et cet. . . . *Tractatus* (Lugduni in Batavis, 1696), pp. 252-253: "Jam etiam post Terentium perlectum, Plautus evolvi potest, ea adhibita cautione, ne omnia ibi reperta, sibi imitanda, imo multa sibi sollicite fugienda ducat adolescens. Nam ne repetam, quod ante jam monui, & cuius eruditio satis notum est, quod dissolutos seculi sui, praecipue autem juventutis gentilis mores, Comici isti describunt, a quibus Christiana pubes quam maxime abhorreere debet: etiam sermo eorum, inprimis Plauti, nonnisi judiciousa imitatione effingendus est juventuti."

⁴ Cf. Antonii Possevini, Mantvani Societatis Jesu, *Bibliotheca Selecta de Ratione Studiorum* (Coloniae Agrippinae, 1607), II, p. 430: "In Tragicis, & Comicis Dionysius ipse Lambinus, quae moribus adversari possent, haud dissimulavit. Itaque ille sic: *Veniamus ad Tragicos, qui omnium manibus teruntur, qui assidue leguntur, qui ediscuntur. Primum ipsa tragoediarum argumenta partim sunt*

who, as a matter of fact, derived a great deal of their historical data and theoretical discussion from Continental writers. There is not space available to discuss the present problem in this connection, but it is worth noting that in general the dramatic species were defined both by friend and by foe, in the traditional terms. While the moral interpretation of *κάθαρσις* was introduced,¹ it did not furnish as important a weapon of offense or defense as the formulas inherited from the Roman grammarians. Furthermore, it was comedy which was most bitterly attacked, and for this there was not even an obscure justification, as there was for tragedy, in the *Poetics* itself.²

atrocia, scelerata, & impia, partim flagitiosa & incesta, partim incredibilia; atque absurda: exempli gratia: liberi a matribus trucidati, et cet. . . . Quid Comici? Nonne hi quoque (addit Lambinus) si summo cum eis iure agere volumus, e Bibliothecis omnibus erunt exigendi? Nihil dicam de Aristophane, notum os veteris comoediae. nota verborum illius non libertas, aut licentia, turpitudine atque impudentia. Plautini item sales nemini sunt inauditi. mitto quam sint improbi, quam scurriles, quam obscoeni. . . . Ne multa. totum argumentum comicum ex senibus, avaris, stultis, deliris: ex adolescentibus amatoribus, intemperantibus, scortatoribus, profusis, ac perditis: ex virginibus aut vi aut pretio corruptis: ex meretricibus ac rapacibus: ex servis fallacibus, ac furacibus: ex lenonibus impiis, ac periuris: ex parasitis edacibus: & ex militibus gloriosis constat. Haec Lambinus."

¹ A. Gazier, *Bossuet, Maximes et Réflexions sur la Comédie* (Paris, 1881), p. 12: "L'Eglise même, dit Saint Augustin, n'exerce la sévérité de ses censures que sur les pécheurs dont le nombre n'est pas grand. (Epist. XXII). C'est pourquoi elle condamne les comédiens; et croit défendre assez la comédie, quand elle prive des sacrements et de la sépulture ecclésiastique ceux qui la jouent."

[Note:] "L'Église déclare publiquement, aux prônes des dimanches, les comédiens excommuniés, et cela conformément aux décrets des anciens conciles: *Placuit*, dit le premier concile d'Arles (can. 5), *quamdiu agunt a communione separari*. On ne peut donc leur accorder ni l'absolution, ni la communion, ni la sépulture ecclésiastique, à moins d'un renoncement absolu à leur profession. *Dict. eccles.* (1765), art. *Comédiens*."

Ibid., p. 57: "Quoique Aristote, son disciple, aimât à le contredire, et qu'une philosophie plus accomodante lui ait fait attribuer à la tragédie une manière, qu'il n'explique pas, de purifier les passions en les excitant (du moins par la pitié et la crainte), il ne laisse pas de trouver dans le théâtre quelque chose de si dangereux, qu'il n'y admet point la jeunesse pour y voir ni les comédies ni même les tragédies." (Polit. VII. cap. xvii.)

² A vast compilation of material against the theatre which would have delighted Tertullian himself is to be found in Gronovius, *op. cit.*, VIII, cols. 1625 ff., *Alberici Gentilis de Actoribus et Spectatoribus Fabularum non Notandis Disputatio*. The

DICTIONARIES

Lexicography is not only an influential but a very conservative science, and while dictionaries and encyclopedias were slow to admit any significance from the *Poetics* for the words tragedy and comedy, to this day they emphasize the traditional meanings accepted by classical antiquity, the Middle Ages, and the early Renaissance.

The lexicon of Firmin Le Ver, prior of the Carthusians of Saint Honoré-les-Abbeville, was composed between 1420 and 1440. Its mediaeval foundations are obvious in its definition of tragedy.¹

The commentaries of Budaëus on the Greek language, published in Paris in 1529, appear to have been embodied in the dictionaries of

chapter headings indicate the nature of the contents: II. *De idolatria scenae*. VIII. *Abominationes*. XII. *Vitia poetarum*. XIII. *Sententia theologorum de histrionibus*. XIV. *Sententia jurisconsultorum*. XIX. *Sententia philosophorum*. XX. *Voluptates non semper damnari*. That Erasmus approved of the drama is apparently good reason for condemning it; it is also claimed that comedies lead to atheism, and the fact that Machiavelli himself composed comedies is a significant bit of evidence. Nevertheless, the refutation of the claim to moral value in comedy is keen (col. 1675): "Erasmus defendunt: qui nec est noster, nec est sanus, & est pendulus, & incertans ubique, & ridens (ita de eo Lutherusque) religionem, vid. Flac. *praef.* N. T. Sleid. IX Apage. *In his quae ad fidei integritatem pertinent, etiam deterius est dubium, quam primum*: ita contra Erasmus etiam Cardanus, III. *de Sap.* Jocos Erasmi defenditis? Et sancta per jocum doceantur? discantur? dedoceantur? dediscantur? Nosque ita monent Apostoli, & Prophetae? Acerbissima ubique, et fere omnia sacrorum sunt librorum: Imo apagete vos lusoires, risoires, doctores religionis jocos mali histriones. *Nihil enim est tam naturale, quam eo genere quidque dissolvere, quo colligatum est*, ut l. 35. *de reg. jur. c. 4. 27. q. 11.* Et risus res est plebeja: ducitque ad vilitatem, Epict. ench. XLIX. Trahit rem risus in suspicionem: ut artificium sophistae est, facetiis diluere, risu discutere serium, Arist. III. *Rhetor.* Haec via ad atheismum prona, praecept. Haec via (audenter dico) athea magis, quam est Macchiavelli." Another comprehensive collection of anti-dramatic authority is to be seen in Gronovius, *op. cit.*, cols. 1713 ff.: *Joh. Ludovici Fabricii. . . De Ludis Scenicis*.

¹ Lanson, *op. cit.*, p. 542: "Tragedia. Oda, quod est cantus, seu laus, componitur cum tragos quod est hircus. Et dicitur hec Tragedia . . . carmen luctuosum quod incipit a leticia et finit in tristitia. Cui contraria est comedia, quia incipit a tristitia et finit in leticia. Unde Tragedia dicitur de crudelissimis rebus, sicut qui patrem seu matrem occidit, seu comedit filium, et e converso s. hujus modi. Unde et tragedo dabatur hircus animal fetidum. Ad fetorem materie designandum. — Tragoedicus . . . luctuosus, funestus."

1554.¹ On the Greek words significant in the definition of tragedy in the *Poetics* many authors are cited, but there are no direct references to Aristotle's *Poetics*. The only mention of tragedy is with reference to Polybius and not to the drama.²

Another early Greek-Latin dictionary, first published in 1548, makes no reference to the *Poetics*, although Plato, Polybius, and Erasmus are mentioned in connection with the words of special significance.³

A dictionary compiled by Pierre Gilles, and published at Basel in 1577, directs the student, under the word *τρῆγῳδία*, to read Aristotle's *Poetics*, but apart from this there is no reference to that source under the words significant in the *Poetics*,⁴ although he had drawn upon the work of several eminent scholars.

A lexicon of great influence was that of Forcellini (1688-1768) in which, under *comoedia*, *Fest. ap. Paul. Diac.* and *Isid. VIII. Orig. 7, 6*, are cited, and, while classical texts are referred to, the definitions proposed are founded on the Roman grammarians.

The dictionary of the Spanish Academy retains the ideas of the Roman grammarians, without considering the *Poetics* of Aristotle. Under the word *comedia* it begins with the traditional use, but asserts that in Spain it had been extended to all kinds of dramatic productions. The formula of Theophrastus is quoted and Cicero is cited. For tragedy there is a short reference to the definition of Diomedes.⁵

The edition of the dictionary of the Accademia della Crusca still in use, relies mainly on Dante for its definition of comedy.⁶ Another Ital-

¹ G. Budaeus, *Commentarii Linguae Graecae*. Venundantur Iodoco Badio Ascensio (Paris, 1529). Cf. Lanson, *op. cit.*, p. 573. The dictionaries are: "Lexicon Graeco-Latinum, seu Thesaurus Graecae Linguae," Jean Crispin, 1554, with a preface by Claude Baduel; *Dictionarium Graeco-Latinum*, Charles Estienne, 1554.

² *Commentarii*, p. 714.

³ *Junii Hornani Hadriani, Lexicon sive Dictionarium, Graeco-Latinum* (Basel, 1557), s.v. *κάθαρσις* and *τράγωδια*.

⁴ Pierre Gilles. *ΛΕΞΙΚΟΝ. Hoc est Dictionarium Graecolatinum, Supra Omnes Editiones in hoc Anno ex Variis. . . . G. Budaeum, L. Tuscanum, G. Gesnerum, H. Iunium, R. Constantium, Io. Hartingum, Mar. Hopperum, Giul. Xylandrum* (Basel, 1577).

⁵ *Diccionario de la Lengua Castellana. Compuesto por la Real Academia Española* (Madrid, 1729) s. v. *comedia* and *tragedia*.

⁶ *Vocabolario degli Accademici della Crusca*. Quinta impressione (Florence, 1878), p. 204, s. v. "*Commedia. Sorta di componimento drammatico; in prosa o anche*

ian dictionary still current is also content with mediaeval sources for tragedy.¹ The *Dictionnaire de l'Académie Française*, (Paris 1878, 7th ed.) agrees word for word with the *Nouveau Dictionnaire National de la Langue Française*, par Bescherelle Aîné (Paris, 1887), and the definitions common to both are the traditional ones.² In English, Richardson's dictionary refers the reader to Vossius.³

Without pursuing this line of research further, it may be said that practically the whole weight of lexicographical authority, from the be-

in verso, nel quale si rappresentano per lo più fatti e personaggi della vita privata. Ha esito quasi sempre lieto, e intende, mediante il ridicolo, a correggere i vizj e i difetti degli uomini. . . . Segn. B. Poet. volg. 288: La commedia . . . è una imitazione di cose cattive; ma non già che abbino il sommo grado della cattività: ma è una imitazione di quella parte ridicola, che contien la brutezza. . . . 1. *Commedia dicevasi, secondo la opinione espressa da Dante nel libro De vulgari eloquio, Qualunque componimento in lingua volgare, in quanto che questa non si credeva atta a trattare se non soggetti umili o mezzani.*"

¹ *Dizionario della Lingua Italiana*. Nuovamente compilato dai signori Nicolò Tommaseo e Bernardo Bellini. (Turin, 1879), p. 1535. s.v. "Tragedia. *Poema rappresentativo, che è imitazione di azione grande, fatta da personaggi illustri, con parlar grave, e che ha dolorosa catastrofe. . . .* But. Purg. 22. 2. Tragedia è canto in sublimo stilo, e tratta de' principi, ed ha felice principio, ed infelice fine. *Dante Inf.* 20. Euripolo ebbe nome, e così'l canta L'alta mia Tragedia in alcun loco. . . . But. *ivi*: Dice Virgilio, che la sua Eneide è alta tragedia. Questo finge Dante per dimostrare che in alto stilo è fatta, e che si dèe chiamare tragedia, perche tratta de' fatti dei principi, e incomincia dalle cose liete, e finisce nelle triste e avverse. *D. Volg. Eloq.* 2. 4. Per la tragedia intendo lo stilo superiore; per la commedia l'inferiore. *Galat.* 25. Per tal cagione egli affermava essere state da principio trovate le dolorose favole, che si chiamaron tragedie, acciocchè raccontate, ne' teatri, come in quel tempo si costumava di fare, tirassero le lagrime agli occhi di coloro che avevano di ciò mestiere. *Com. Boez.* 2. Nota che tragedia sono quelli, li quali scivono le geste luttuose delli re; onde tragedia è verso di grandi iniquitadi, incominciante da prosperitate, ed in adversitate terminante."

² "Comédie. Œuvre dramatique, pièce de théâtre dans laquelle on représente une action de la vie commune, et qui peint d'une manière plaisante les mœurs, les défauts ou les ridicules des hommes.

"Tragédie. Pièce de théâtre qui offre une action importante, des personnages illustres; qui est propre à exciter la terreur ou la pitié, et qui se termine ordinairement par un événement funeste."

³ *A New Dictionary of the English Language*, by Charles Richardson, London. 1838 (s.v. *tragedy*).

ginning until our own times, has emphasized the traditional definitions derived from *On Poets*.

It appears, then, that the definitions of the grammarians were not immediately supplanted when the *Poetics* was recovered, but that the traditional formulas continued to occupy men's minds. Until a recent date, the printed editions of classical authors carried the same material that had been popular in the Middle Ages, and even to-day dictionaries carry on the ideas derived from *On Poets*.

VII

What definitions of tragedy and comedy dominated the ideas of England during and after the Elizabethan Age?

In Elizabethan England also there is evidence that when a reliable definition of tragedy or comedy was required, the same traditional formulas that prevailed elsewhere were relied upon. The evidence, to be sure, is scanty, but no more so than critical discussion in general during the period when drama flourished most actively, so that it is sufficiently representative. In the earlier phases, English thought depended on mediaeval sources, supported by Cicero and justified by its reading of Seneca and Terence. In later times it carried on the same principles under the guidance of Scaliger.¹

Douglas had already called Dido's story a tragedy, in 1513,² and mediaeval plays in the vernacular were often termed comedies. When references to classical drama began, they were accompanied by the moralistic defense, as in Sir Thomas Elyot, for in speaking of "Terence and others that were writers of comedies," he said that the mirror of life which comedy presents does not instruct in wickedness but rather serves as a warning to spectators.³

¹ Cf. Henry Peacham (Spingarn, *Critical Essays of the Seventeenth Century*, Oxford, 1908, I, p. 128) who, in 1622 said: "Thus haue I, in briefe, comprised for your behoofe the large censure of the best of Latine Poets, as it is copiously deliuered by the Prince of all learning and Iudge of iudgements, the diuine Iul. Caes. Scaliger."

² Douglas, *Aeneis*, IV, *Prolog.* 264.

³ Sir Thomas Elyot, *The Booke Named the Gouernour*, ed. H. H. S. Croft (2 vols., London, 1880), I, p. 124.

The metaphorical use, exemplified throughout the preceding ages and founded on the traditional formula rather than on the definition in the *Poetics*, had continued in English literature also.¹

Mirror for Magistrates

The meaning accepted by Lydgate was carried on in another influential series of disastrous narratives, *The Mirror for Magistrates*. Tragedy is applied to the fate of the two sons of King Edward,² and in the *Induction* it is similarly employed.³ The influence of this compilation on the poetry and drama of the Elizabethan Age is well recognized.

Galateo

According to Symmes, the first record in English of the idea of tragic purgation is to be found in the translation of the *Galateo*. In this work it is asserted that man has better cause to weep than to laugh, and therefore tragedies were devised, that "They might draw fourth teares out of their eyes that had neede to spend them. And so they were by their weeping healed of their infirmities."⁴ But it was long before anything more clear than this obscure reference to the purgation became general in English criticism, and the traditional formula has

¹ NED s.v. tragedy. 1598-99 [E. Forde] *Parismus* I (1661) 68: "I fear he is destroyed by the treachery of that wicked homicide . . . who is not contented with his tragedy, but also seeketh my destruction." 1535, Layton in *Lett. Suppress. Monasteries* (Camden), 76: "To tell yowe all this commodie, but for thabbot a tragedie, hit were to long."

² *Mirror for Magistrates*, edited by Joseph Haslewood (3 vols., London, 1815), I, p. xi.

³ *Ibid.*, I, pp. 16-17:

For some, perdy, were Kinges of highe estate,
And some were Dukes, and came of regall race:
Some Princes, Lordes, and Iudges greate that sate
In counsell still, decreeing euery case.
Some other Knightes, that vices did imbrace,
Some Gentlemen, som poore exalted hye:
Yet euery one, had playde his tragedye.

⁴ H. S. Symmes, *Les Débuts de la Critique Dramatique en Angleterre* (Thesis) Paris, 1903, P. 46. (Giovanni della Casa, *Galateo of Manners and Behaviours*, Englished by Robert Peterson, London, 1576, p. 31.)

not yet been supplanted in ordinary usage. For this there seem to be several reasons, of which the following may be mentioned: (1) A reliable tradition founded ultimately on Aristotle's dialogue, known through the Roman grammarians, had already been accepted in England, and the *Poetics* introduced later did not provide a sufficiently strong motive for abandoning it. (2) Whatever the *Poetics* might suggest regarding a moral justification of poetry, which could be considered an intrinsic element of the definition of tragedy, there was no clear parallel statement for comedy, so that critics were obliged to rely on the traditional theory of comedy in any case. (3) Where certain erudite men of letters and critics did expound tragedy in terms of the *Poetics*, there was such difference of opinion on details, and such a confusion as to its real meaning and function in a definition of the species, that it never prevailed as against the authoritative and accepted formula.¹

¹ In the *Ragionamento di M. Agnolo Segni, Gentilhuomo Fiorentino, Sopra le Cose Pertinenti alla Poetica* (Florence, 1581), the difficulties of the katharsis clause as an element in the definition of tragedy had been clearly seen and stated in a way that is worth remembering now. Cf. pp. 47 ff.: "Hora la purgazione d'Aristotile come si debbe intendere, questo hà difficultà non piccola. E' non è dubbio, che secondo lui la Tragedia ci empie di passioni, di misericordia, & di timore: & questo è il primo fine, nel quale con Platone conuiene: ma non si ferma, & ne troua un' altro più innanzi, il quale è la purgazione degli affanni mediante que' due, & questo è l'ultimo fine. Tutto questo è chiaro & indubitato della Tragedia, ma non s'intende di quali affetti sia quella purgazione, nè in che modo ella si faccia. Alcuni dicono, che la purgazione è de' medesimi affetti misericordia, & timore, sì che la Tragedia de' medesimi empia prima l'animo nostro, & poi lo voti: & hanno loro ragioni. Altri, che la purgazione sia pur de' medesimi misericordia, & timore, ma non in tutto estirpazione, ma moderazione: che la Tragedia modera, & diminuisce in noi questi due affetti, & mediante questi gli altri simili à loro. Nè l'una, nè l'altra interpretazione si può accettare per le ragioni, che vdirete: ma prima vi voglio dire come intende breuemente tutta questa purgazione. Mediante la misericordia, e'l timore si fa purgazione in noi, dice Aristotile, d'altri affetti, di quali? di quegli, dico, che sono contrarij à que' due: & che à loro siano altri contrarij, che non possono con loro stare insieme, è manifesto in Aristotile nella Rettorica: & che l'uno affetto cacci l'altro, egli medesimo lo manifesta nel medesimo libro. Ma dicendo lui (di tali affetti) vuol dire d'altrui simili à questi, simili, perche tutti sono affetti, et passioni dell' appetito: che se hauesse inteso i due nominari, harebbe detto di questi, & non di tali. Hora mostreremo, che Aristotile non poteua intendere i due affetti misericordia, et timore, che la purgazione sia di questi nè nel primo modo,

LODGE

In 1580 Thomas Lodge published his *Defense of Plays* against the attacks of Gosson. He asks: "What made Erasmus labor in Euripides tragedies?"¹ On this the editor of the important Elizabethan critical essays has a note which suggests Lodge's source in a characteristic edition of Erasmus's translation.² Lodge cites Donatus and Iodocus Badius for the etymology and origin of tragedy and comedy, and refers to the "sower fortune of many exiles, the miserable fall of hapless princes" in traditional vein.³ A little later he quotes Cicero's definition of comedy.⁴

Gosson challenged Lodge to locate this definition in the text of Cicero.⁵ Klein comments: "The fact was that Lodge had found the definition in Donatus. The strangest thing about it is that such a thorough scholar as Jonson should have attributed the phrase to Cicero twenty years later."⁶ It would have been stranger yet if he had failed

nè nel secondo delle due interpretazioni predette." p. 50: "Io ho sempre inteso & sperimentato, che il fare qualunque cosa più volte, & l'auuezzarsi à fare è causa, che poi si ritorna al somigliante, che il fare insegna fare, & si fa venire dietro sempre il medesimo. A questo Assioma fermissimo, & verissimo contradice quella opinione, che vuole, che auuezzandoci noi nella Tragedia à piangere, poi non piangiamo, ò moderatamente piangiamo secondo l'altra, & che'l timore ci faccia sicuri & arditi. Male V. A. il pianto asciugherà gli occhi, il terrore assicurerà, & l'intenerire spesso ci potrà indurare; anzi tutto il contrario interuerrà della Tragedia. Per quella opinione rouinerebbe tutta la dottrina d'Aristot. morale, che sempre dice, che gli huomini col fare le cose giuste diuentano giusti, & poi di nuouo fanno le medesime cose giuste meglio che prima, & così in tutte le cose."

¹ G. Gregory Smith, *Elizabethan Critical Essays* (2 vols., Oxford, 1904), I, p. 68.

² *Ibid.*, p. 366; "Erasmus 'interpreted' or translated *Hecuba* and *Iphigenia*. Lodge's reference to these, to Buchanan, and to Donatus suggests the idea that he was familiar with a popular edition of *Tragœdiae selectae* issued by Henri Estienne, printer to Huldreich Fugger (1567, &c.), which contains the interpretations of *Hecuba* and *Iphigenia* by Erasmus (pp. 115-117), the tract by Donatus *De Tragoedia et Comoedia* (pp. 118-128), the interpretation of the *Medea* and *Alcestis* (pp. 129-133) and of the *Ajax*, *Antigone*, and *Electra* of *Sophocles*, by Georgius Rotallerus."

³ *Ibid.*, I, p. 80.

⁴ *Ibid.*, I, p. 81.

⁵ In *Playes Confuted* (Nov., 1579). Cf. G. Gregory Smith, *op. cit.*, I, pp. 369-370.

⁶ David Klein, *Literary Criticism from the Elizabethan Dramatists* (New York, 1910), p. 16.

to use the phrase and to attribute it to Cicero. We have already seen that the words are paralleled in Cicero's extant works, if not in this identical grammatical form. Modern classical scholars accept the formula and assign it a definite position in collected fragments. The weight of tradition for about 2000 years was thus behind Lodge, both as to the form and content of his quotation from Cicero.

SIDNEY

Sir Philip Sidney appears to uphold the Ciceronian definition also, interpreting it in the manner characteristic of criticism until a recent date.¹ He also attempts to refute the example from Plutarch, of the tyrant Alexander Phraeus, used by writers who attacked the stage, as showing that a man could be emotionally affected by tragedy, and yet remain a bloodthirsty criminal.²

KYD AND WEBBE

A passage in Kyd's *Spanish Tragedy* reaffirms the traditional conception.³ Webbe, again, in his *Discourse of English Poetry* (1586) repeats

¹ G. Gregory Smith, *op. cit.*, I, p. 176-177: "Onely thus much now is to be said, that the Comedy is an imitation of the common errors of our life, which he representeth in the most ridiculous and scornfull sort that may be; so as it is impossible that any beholder can be content to be such a one."

² *Ibid.*, I, pp. 177-178: "But how much it can moouē, *Plutarch* yeeldeth a notable testimonie of the abhominable Tyrant *Alexander Phraeus*; from whose eyes a Tragedy, wel made and represented, drewe aboundance of teares, who, without all pittie, had murthered infinite numbers, and some of his owne blood. So as he, that was not ashamed to make matters for Tragedies, yet coulde not resist the sweet violence of a Tragedie. And if it wrought no further good in him, it was that he, in despight of himselfe, withdrewe himselfe from harkening to that which might mollifie his hardened heart." (Plutarch, *Life of Pelopidas*, 29.)

³ Klein, *op. cit.*, p. 22:

Balthazer. Hieronimo, methinks a comedy were better.
Hier. A comedy! fie! comedies are fit for common wits;
 But to present a kingly troop withal,
 Give me a stately written tragedy;
 Tragoedia cothurnata, fitting kings,
 Containing matter, and not common things.

the familiar distinctions between tragedy and comedy.¹ These were not merely "scholastic," as termed by Klein; they originated in the very source from which scholastic philosophy gained inspiration.² Webbe's account of the etymology and origin of the dramatic species is directly from Donatus.³

SHAKESPEARE

In Shakespeare, likewise, there is no divergence from the traditional and reliable definitions. Bosanquet notes his acceptance of the ideas:⁴

Coming upon the arena thus prepared for him, Shakespeare adopts a distinctly traditional dramatic form. He accepts the complicated organic structure of Latin comedy, with its five acts and separate scenes. He is more careful than his crude predecessors to motive or excuse his violation of the unities. He observes, except in the histories, with hardly any deviation, the sharp distinction between tragedy and comedy which Dante applied so strangely. That is to say, in the plays of which the catastrophe is not tragic, the happy ending or reconciliation is absolutely complete, and no irrevocable misfortune befalls any character in the play.

Bosanquet's observation is accurate, with the exception of the word "strangely" applied to Dante's use. In that particular he is obviously influenced by Hegel, Bernays, and other moderns rather than by the unbroken, authoritative tradition that extends from Aristotle's dialogue *On Poets* down to the popular usage of to-day.

In *Love's Labour's Lost* (V, ii, 515),⁵ Shakespeare refers to Christmas plays as comedies; in the same play (V, ii, 950-952)⁶ he speaks of the

¹ G. Gregory Smith, *op. cit.*, p. 249; William Webbe, *Of English Poetry* (1586); "There grewe at last to be a greater diuersitye betweene Tragedy wryters and Comedy wryters, the one expressing onely sorrowfull and lamentable Hystories, bringing in the persons of Gods and Goddesses, Kynges and Queenes, and great states, whose partes were cheefely to expresse most miserable calamities and dreadfull chaunces, which increased worse and worse, tyll they came to the most wofull plight that might be deuised. The Comedies, on the other side, were directed to a contrary ende, which, beginning doubtfully, drewe to some trouble or turmoyle, and by some lucky chaunce alwayes ended to the ioy and appeasement of all parties."

² Klein, *op. cit.*, p. 20.

³ G. Gregory Smith, *op. cit.*, I, pp. 248-249.

⁴ Bosanquet, *History of Aesthetic* (London, 1910), p. 155.

⁵ Furness, *Variorum Shakespeare*, XIV, p. 272.

⁶ *Ibid.*, p. 315.

standard ending of comedy; and in the *Midsummer Night's Dream* there is stressed the fatal ending of tragedy:

Lis. A tedious breefe Scene of yong *Piramus*,
And his loue *Thisby*; very tragicall mirth.

The. Merry and tragicall? Tedious and briefe? That
is, hot ice, and wondrous strange snow. (V, i, 63-66)

And tragicall my noble Lord it is: for *Piramus*
Therein doth kill himselfe. (V, i, 73-74) ¹

The most important reference is, however, in *Hamlet* III, ii, 19-23, where the phrase of Cicero receives perpetuation in English Literature:

. . . the purpose of playing, whose end, both at the first and now, was and is, to hold, as 'twere, the mirror up to nature; to show virtue her own feature, scorn her own image, and the very age and body of the time his form and pressure.²

The example of Shakespeare has given pause to many critics, whose minds are naturally filled with the definition of tragedy found in the *Poetics*, but interpreted by the mid-nineteenth century. Some of the most acute have fairly acknowledged the bearing of Shakespeare's historical background on his conceptions, as for example, A. C. Bradley, who points out that for the poet tragedy is "essentially a tale of suffering and calamity conducting to death."³ He shows further that it conforms to the traditional view: "The suffering and calamity are, moreover, exceptional. They befall a conspicuous person. They are themselves of some striking kind."⁴ Again, he repeats: "Shakespearean tragedy as so far considered may be called a story of exceptional calamity leading to the death of a man in high estate."⁵

PUTTENHAM

The theories of critics were not inconsistent with the reflections of opinion in the dramatists. In the *Arte of Poesie*, attributed to Puttenham (1589), appears the familiar distinction between tragedy and

¹ *Ibid.*, X, pp. 206-207.

² *Ibid.*, III, pp. 227-228.

³ A. C. Bradley, *Shakespearean Tragedy* (London, 1905), p. 7.

⁴ *Ibid.*, p. 8.

⁵ *Ibid.*, p. 11.

comedy.¹ The standard moralistic interpretation or defense is to be seen in the title of a chapter following that in which the distinction is stated.²

JONSON

Ben Jonson, who protested against the tendency to make Aristotle a dictator of literary theory,³ accepted the traditional definitions and distinctions. In the Prologue (1598?) to *Every Man in his Humour* there is a repetition of Cicero, with moral application, in striking phrases.⁴ In *Every Man out of his Humour*, III, i, there is a vivid paraphrase of the same idea.⁵ Shortly following this passage is one in which Jonson

¹ G. Gregory Smith, *op. cit.*, II, p. 27: "There were also Poets that wrote onely for the stage, I meane playes and interludes, to recreate the people with matters of disporte, and to that intent did set forth in shewes [&] pageants, accompanied with speach, the common behauiours and maner of life of priuate persons, and such as were the meaner sort of men, and they were called *Comicall Poets*: . . . Besides those Poets *Comick* there were other who serued also the stage, but medled not with so base matters, for they set forth the dolefull falles of infortunate & afflicted Princes, & were called Poets *Tragicall*: . . ."

² J. Haslewood, *Ancient Critical Essays upon English Poets and Poetics* (London, 1811), I, p. 25: "How vice was afterward reprobued by two other maner of poems, better reformed then the satyre, whereof the first was comedy, the second tragedie."

³ Spingarn, *Critical Essays of the Seventeenth Century*, I (Oxford, 1908), p. 42.

⁴ Cf. G. Gregory Smith, *op. cit.*, II, p. 389; from *The Workes of Beniamin Ionson*. Folio 1616. (Bodleian Library. Douce, I, p. 302.) The Prologue may be dated 1598.

"But deedes, and language, such as men doe vse,
And persons, such as *Comoedie* would chuse,
When she would shew an Image of the times,
And sport with humane follies, not with crimes,
Except we make 'hem such, by louing still
Our popular errors, when we know th' are ill.
I meane such errors as you'll all confessee,
By laughing at them, they deserue no lesse:
Which when you heartily doe, there's hope left then,
You, that haue so grac'd monsters, may like men."

⁵ *The Works of Ben Jonson*, edited by W. Gifford (London, 1875), II, p. 17:

"Well, I will scourge those apes,
And to these courteous eyes oppose a mirror,
As large as is the stage whereon we act,
Where they shall see the time's deformity
Anatomized in every nerve and sinew."

challenges "these autumn-judgments" to define comedy better than Cicero had done.¹ The five sections of Jonson's *Discoveries* dealing with tragedy, instead of being independent errors, as many critics in the last century have judged, are a literal translation from the Dutch critic Heinsius, whom we have discussed above.²

MILTON

Milton did not deviate from the orthodox doctrine in his views which are due partly to classical sources but also to the Italian theorists.³ The most important passage treating of tragedy is to be found in his preface to *Samson Agonistes*, where the famous definition of Aristotle's *Poetics* is reproduced and translated: *per misericordiam et metum perficiens talium affectuum lustrationem*.⁴ Spingarn correctly notes that Milton's discussion points to a reading of Minturno, but he reads into Aristotle, Minturno, and Milton something that did not occur to many minds until several centuries later, when he adds: "both Milton and Minturno clearly perceived that by katharsis Aristotle had reference not to a moral, but to an emotional effect."⁵ Milton did perceive, in common with previous criticism, that the phrase in Aristotle is best adapted to purposes of defense against the enemies of the drama.⁶ He paraphrases

¹ *Ibid.*, II, pp. 108-109: "*Cor.* You say well, but I would fain hear one of these autumn-judgements define once, *Quid sit comoedia?* if he cannot, let him content himself with Cicero's definition, till he have strength to propose to himself a better, who would have comedy to be: *imitatio vitae, speculum consuetudinis, imago veritatis*; a thing throughout pleasant and ridiculous, and accomodated to the correction of manners."

² Cf. Maurice Castelain. *Ben Jonson, Discoveries, A Critical Edition*. (Thesis) Paris, 1907, p. xx.

³ Cf. Spingarn, *Critical Essays*, I, pp. 196 and 206.

⁴ *English Poems of John Milton* (edited by R. C. Browne, revised by H. Bradley; Oxford, 1902), II, p. 204.

⁵ Spingarn, *Literary Criticism*, pp. 80-81.

⁶ *English Poems*, II, p. 205: "This is mentioned to vindicate tragedy from the small esteem or rather infamy, which in the account of many it undergoes at this day with other common interludes; happening through the poet's error of inter-mixing comic stuff with tragic sadness and gravity; or introducing trivial and vulgar persons, which by all judicious hath been counted absurd; and brought in without discretion, corruptly to gratify the people."

the idea, saying of the emotions that katharsis is "to temper and reduce them to just measure."¹

HEYWOOD

Another document in the controversy over the theatre was produced by Thomas Heywood. In the modern edition of his work the editor left the Greek quotation in the corrupt state due to Heywood's printer, without suspecting that Donatus was the authority for the definition of comedy stated, although he is expressly cited at the beginning of the passage.²

SHADWELL

An interesting suggestion in the discussion of the moral effect of tragedy and comedy is provided by Thomas Shadwell, incidentally, of course, implying the traditional formula. Tragedies, according to Shadwell, are of moral benefit particularly to royalty, whereas comedy possesses ethical value for ordinary people. But teaching royalty is such a hazardous business that it is wiser to be concerned with comedy.³

PHILLIPS

More significant, however, is the reference of Edward Phillips because the preface of his *Theatrum Poetarum* is so much better than his

¹ *Ibid.*, p. 204.

² Thomas Heywood, *An Apology for Actors in Three Books*. From the edition of 1612, compared with that of W. Cartwright. Reprinted for the Shakespeare Society (London, 1841), p. 49: "Tragedies and Comedies, saith Donatus, had their beginning *a rebus divinis*, from divine sacrifices. They differ thus: in comedies *turbulenta prima, tranquilla ultima*: in tragedyes, *tranquilla prima, turbulenta ultima*: comedies begin in trouble and end in peace; tragedies begin in calmes, and end in tempest. . . . The definition of the comedy, according to the Latins: a discourse, consisting of divers institutions, comprehending civill and domesticke things, in which is taught what in our lives and manners is to be followed, what to bee avoyded. The Greekes define it thus: Κωμωδία ἔστιν ἰδιωτικῶν καὶ πολιτικῶν πραγμάτων ἀχιν δονος ποροίχην. Cicero saith a comedy is the imitation of life, the glasse of custome, and the image of truth."

³ Thomas Shadwell, *Preface to The Humorists, A Comedy* (1617) (Spingarn, *Critical Essays*, II, p. 154): "And in this latter I think Comedy more useful than Tragedy; because the Vices and Follies in *Courts*, as they are too tender to be touch'd, so they concern but a few, whereas the Cheats, Villanies, and troublesome Follies in the common conversation of the World are of concernment to all the Body of Mankind."

other work that the aid of his uncle, Milton, has been suspected.¹ The phrase "passionately sedate and moving" recalls Milton, but the discussion as a whole relies largely on the Roman grammarians.²

DRYDEN

In his *Essay of Dramatick Poesie*,³ Dryden presents a definition of the drama in general which is placed in the mouth of *Lisideius*, thought to be Sir Charles Sedley, and this definition is an interesting combination of the elements common to both tragedy and comedy, some of which come from the grammarians.⁴ The same speaker suggests that; "Of that book which Aristotle has left us *περὶ τῆς Ποιητικῆς* Horace, his *Art of Poetry* is an excellent comment, and, I believe, restores to us that Second Book of his concerning Comedy which is wanting in him."⁵

RYMER

Among the neo-classic critics Rymer was powerful, at a later time, through his translation of Rapin and through his own work in the same temper. Thus, through his translation, the Ciceronian definition of

¹ Spingarn, *Critical Essays*, II, p. 350.

² *Ibid.*, Edward Phillips, *Preface to Theatrum Poetarum* (1675), II, p. 269: "Next to the *Heroic Poem* (if not, as some think, equal) is *Tragedy*, in conduct very different, in height of Argument alike, as treating only of the actions and concerns of the most Illustrious Persons, whereas *Comedy* sets before us the humours, converse, and designs of the more ordinary sort of People: the chief parts thereof are the *ἦθος* & *πάθος*, by which latter is meant that moving and Pathetical manner of expression, which in some respect is to exceed the highest that can be delivered in *Heroic Poesie*, as being occasioned upon representing to the very life the unbridled passions of Love, Rage and Ambition, the violent ends or downfalls of great Princes, the subversion of Kingdoms and Estates, or what ever else can (be) imagined of funest or Tragical, all which will require a style not ramping, but passionately sedate & moving. . . ."

³ Published in 1668. Reprinted in Clark, *European Theories*, pp. 174 ff.

⁴ Clark, *op. cit.*, p. 176: "A just and lively image of human nature, representing its passions and humors, and the changes of fortune to which it is subject, for the delight and instruction of mankind."

⁵ Clark, *op. cit.*, p. 177.

comedy¹ and the moralistic explanation of tragic purgation² were again impressed on English readers. Elsewhere he expands his moralistic interpretation of Horace and Aristotle.³ He uses the Ciceronian formula as another basis to condemn *Othello*,⁴ and he disagrees with Rapin only when the latter claims that the English should have a special capacity for tragedy because of their cruelty.⁵

STEELE

An interesting and amusing publication is the grammar attributed to Steele. Its prose is relieved by versified passages, among

¹ [Rymer] *Reflections on Aristotle's Treatise of Poesie Containing the Necessary, Rational and Universal Rules for Epick, Dramatick, and the other Sorts of Poetry*. By R. Rapin (London, 1674), p. 124. *Monsieur Rapin's Reflections on Aristotle's Treatise of Poesie . . . Made English by Mr. Rymer*. [In the *Whole Critical Works of Monr. Rapin*. Translated by Basil Kennet, and others.] (3d ed., London, 1731), II, p. 219.

² *Ibid.*, pp. 204-205.

³ Thomas Rymer. *Tragedies of the Last Age Consider'd and Examined by the Practice of the Ancients and by the Common Sense of all Ages*. (London, 1678), p. 140: "Some would blame me for insisting and examining only what is apt to please, without a word of what might profit.

"1. I believe the end of all Poetry is to please.

"2. Some sorts of Poetry please without profiting.

"3. I am confident whoever writes a Tragedy cannot please but must also profit; 'tis the Physick of the mind that he makes palatable.

"And besides the purging of the passions, something must stick by observing that constant order, that harmony and beauty of Providence, that necessary relation and chain, whereby the causes and the effects, the virtues and rewards, the vices and their punishments are proportion'd and link'd together; how deep and dark soever are laid the Springs, and however intricate and involv'd are their operations." (Spingarn, *Critical Essays*, II, pp. 206-207.)

⁴ Rymer, *A Short View of Tragedy* (London, 1693), [in Spingarn, *Critical Essays*, II, p. 227]: "But besides the Manners to a *Magnifico*, humanity cannot bear that an old Gentleman in his misfortune should be insulted over with such a rabble of Skoundrel language, when no cause or provocation. Yet thus it is on our Stage; this is our School of good manners, and the *Speculum Vitae*."

⁵ Rymer, *Monsieur Rapin's Reflections*, II, p. 112: ". . . he confesses, that we have a Genius for Tragedy above all other People; one Reason he gives we cannot allow of, viz. *The Disposition of our Nation, which, he saith, is delighted with cruel Things*."

which the traditional definitions of comedy¹ and of tragedy² are introduced.

BLOUNT

The influence of the Renaissance philologists and of Rapin continued down to the end of the century, and in 1770 a work in which they are much quoted was judged a suitable book to give to the Library of Harvard College by Sir Thomas Hollis.³ Blount notes the opinion of Vossius with regard to the *Poetics*, that its present state represents substantially the original scope of the work.⁴ He cites Rapin repeatedly,⁵ quotes Donatus by way of the Abbé d'Aubignac,⁶ and in discussing Terence relies on Heinsius, Erasmus, Scaliger, Vossius, Lipsius, and Rapin, among others.⁷

¹ [Sir Richard Steele], *A Grammar of the English Tongue . . . The Whole Making a Compleat System of an English Education. For the Use of the Schools of Great Britain and Ireland* (4th ed. London, 1721), p. 150:

"In Comic Scenes the common Life we draw,
According to its Humours, Actions, Law,
And Vice and Folly laughing, keep in awe.
But what is yet a nobler, juster End,
To all the Charms of Virtue do's commend."

² *Ibid.*, p. 154:

"One only Action; that's entire and grave,
And of just length, the Tragic Muse must have
The Object of its artful Imitation,
And that without the Help of the Narration,
By the strong Pow'r of Terrour and Compassion.
All sorts of Passion perfectly refines,
And what is in us to Passion else inclines."

³ Sir Thomas Pope Blount, *De Re Poetica, or, Remarks upon Poetry. With Characters and Censures of the Most Considerable Poets, whether Ancient or Modern*. [New pagination for *Characters and Censures*, contained in same volume.] London, 1694.

⁴ *Ibid.*, *Characters*, p. 16: "Aristotle had finish'd; and given the last strokes to this most Excellent Work; And this, says *Vossius*, may easily be prov'd by that curious *Method*, and admirable *concatenation*, which he hath observ'd from first to last."

⁵ *Ibid.*; cf. pp. 45, 55.

⁶ *Ibid.*, p. 54.

⁷ *Ibid.*, p. 227.

TRAPP

The Latin lectures on poetics of Joseph Trapp were apparently popular, for the third edition had been reached by 1736 and an English translation came out in 1742.¹ He combines Cicero and Horace ingeniously in his definition of the drama,² and his definition of comedy is a logical expansion of the result,³ with the moral effect emphasized. He also combines Aristotle and Vossius to secure a definition of tragedy.⁴

PEMBERTON

In 1738 was published an interesting work on poetics by Henry Pemberton. He sets forth a view of tragedy,⁵ relying on Aristotle, and of comedy depending on Horace and Cicero.⁶

¹ Joseph Trapp, *Lectures on Poetry*, translated from the Latin (London, 1742).

² Trapp, *Praelectiones Poeticae in Schola Naturalis Philosophiae Oxon. Habita* (2 vols., London, 1736), (3d ed.), II, pp. 153-154. "Drama hoc modo definimus: Nimirum quod sit, *Poema certam quandam actionem continens, et veram humanae vitae imaginem exhibens, delectationis atque utilitatis, causa.*

³ *Ibid.*, II, p. 201: "Nimirum, quod sit *Poema Dramaticum, vitae communis et privatae imaginem exhibens, virtutem commendans, & vitia quaedam, atque ineptias hominum perstringens, jocosa praecipue, sive lepida scribendi ratione.*"

⁴ *Ibid.*, II, p. 241: "Ex duabus igitur Definitionibus simul collatis tertia conficienda, *Aristotelica* quidem clarior, *Vossiana* vero perfectior: *Est itaque. Tragoedia Poema Dramaticum, illustrem fortunam, sed luctuosam, gravi, et severa, sed videtur in jucunda oratione, imitans; ad affectus, praesertim Misericordiam, & Terrorem, ciendos, animumque ab iis purgandum.*"

⁵ Henry Pemberton, *Observations on Poetry, Especially the Epic, Occasioned by the Late Poem on Leonidas* (London, 1738), p. 21: "The genuine design of comedy is to represent the true source of private enjoyment from family affections, and the judicious choice of our acquaintances and friends; to shew the inconveniences arising from imprudent conduct, and the irregular sallies of passion, together with the ridicule due to capriciousness of temper, and other particularities of humorists: tragedy on the other hand is adapted to form the mind to compassion, to give just apprehensions of the uncertain state of human felicity, to set forth the excellence of fortitude, public benevolence, and the other great virtues, and to inspire a detestation of the contrary vices."

⁶ *Ibid.*, p. 23: "Whereas tragic and epic poetry relate chiefly to men in high station, and comedy or similar narrations regard the busy part of common life as it is found in cities and large societies; so the true office of pastoral is to express the cares and the amusements of the rustic condition."

COOKE

In a work dedicated to David Garrick,¹ William Cooke draws the usual distinctions between tragedy and comedy in his chapter XXVI, and he quotes Cicero by way of Rapin on comedy.²

CONCLUSION

The passages cited in the foregoing pages are, of course, but a fragment of the available material. They are, however, representative and significant. Further investigation would serve to make the relation of the standard definitions to each period and author more precise, but not to destroy the fundamental thesis of this article. That thesis is: *The definitions of tragedy and comedy, ultimately derived from Aristotle's On Poets dominated European theories from the time of Aristotle down to the Romantic movement.* Both Greek and Roman literature show that the *Poetics* had comparatively slight influence in determining ancient ideas of the nature of tragedy and comedy, but the presence of the standard definitions, the essence of which is contained in the words of Theophrastus, is everywhere to be found. The Middle Ages accepted the same statements, and Dante as well as Chaucer did no more than participate in the universal inheritance. During the Renaissance and afterwards, both on the Continent and in England, ideas of the tragic and comic, of tragedy and comedy, were not radically or immediately altered by the recovery of Aristotle's *Poetics*, but continued fundamentally to depend on the traditional conceptions. It was not until the Romantic movement that any other understanding of tragedy and comedy gained ground, and not until some time afterwards that classical philology, influenced by the Romantic philosophies, reinterpreted the *Poetics* in a manner unknown to all previous ages and to Aristotle himself. Even to-day popular usage and the dictionaries ignore this Romantic interpretation of the *Poetics* and carry on the definitions derived from the dialogue *On Poets*.

¹ William Cooke, *The Elements of Dramatic Criticism* (London, 1775), p. 136.

² To supplement the suggestions made above, interesting material on the study of the *Poetics* in the eighteenth century in England, is to be found in John W. Draper, "Aristotelian 'Mimesis' in Eighteenth Century England," *Publ. of the Mod. Lang. Assoc.*, XXXVI (1921), p. 372.

SUMMARIES OF DISSERTATIONS FOR THE DEGREE
OF PH.D., 1928-29

MICHAEL GEORGE HOWARD GELSINGER. — *De Codice Vergiliano
Bernensi CLXV*

THIS dissertation studies the character of the manuscript known as Bernensis 165 (Ribbeck's *b*) and attempts to show its relation to the other Virgilian manuscripts used by Ribbeck and later editors.

The codex is a book of Tours, and is regularly assigned to the ninth century. Variant forms of certain letters (especially *a* and *n*), the occurrence of some ligatures, and the occasional intermingling of semi-uncial and minuscule forms strongly suggest that the script, beautiful and vigorous as it is, is of a period somewhat earlier than 820; for, as Edward Kennard Rand shows in his new work (*Studies in the Script of Tours*), it was about that time that the script of Tours attained full maturity. The notae used for *-tur* also suggest a date fairly early in the ninth century; for the apostrophe symbol, which appears to have gone out about 820, occurs nine times, and — as has happened in other books also — a number of examples of the 2-symbol almost certainly have been corrected from the apostrophe symbol.

It is difficult to say how many hands should be distinguished in the manuscript. It is certainly the work of more than one scribe, and it seems possible to distinguish at least ten, including the hand which recorded the dedication of the book to St. Martin of Tours by a certain Berno. From the errors made by the scribes it is clear that the book was not copied from a manuscript written in capitals, as Ribbeck supposed, but from one written in minuscules; certain confusions of letters suggest that the minuscules of the archetype may well have been the Irish Round.

Since Ribbeck's time it has been held that our manuscripts of Virgil descend from a single archetype. However, in order to define the relation of *b* to the other manuscripts, the author of the thesis has turned aside from this theory and carried further an investigation, begun in the Latin Seminary at Harvard, which tried to show that the Virgilian manuscripts fall into two families. The study, which proceeded on the theory that manuscripts are related to one another by their agree-

ments in error, was based on the apparatus in Ribbeck's edition, and led to these conclusions: Of the manuscripts in capitals, *F* and *P* belong to one family, and *AGMRV* belong to another; but *R*, while clearly of the same family as *AGMV*, has been affected by the tradition represented by *F* and *P*. With the exception of the Gudianus, the minuscule books used by Ribbeck and Hirtzel belong to the *AGMRV* family; the Gudianus has been affected by the text of the *AGMRV* family but is nevertheless unmistakably a member of the same family as *F* and *P*. Within the *AGMRV* family, then, the character of *b* was defined by showing (1) that it does not enter into some of the groupings which community of error creates for the books of the family (for example, such as those which associate *M* with the Pragensis, *V* with the Minoraugiensis, *R* with *a* [Bernensis 172 and Parisinus 7929]); and (2) that it goes rather with *c* (Bernensis 184) than with any other of the minuscules, and further exhibits a few striking agreements with *G* unshared by any other manuscript. Its text, however, is better than that of *c*, for *c* shares some of the readings which came into *R* and *a* from the *FP* family. Indeed, Bernensis 165 has preserved the text of its family with a fidelity which rivals that of *M* itself.

THEODORE TOLMAN JONES. — *De Sermone Celsiano*

THE language of Celsus comprises both words of vulgar speech and words that have a special meaning in our author, who, being a physician, used many words in a peculiar sense.

I have assumed the existence of Vulgar Latin among the Romans, but, if the theory needed further verification, this study of Celsus would add something in support of it. Briefly stated, the theory is that the earlier writers like Plautus, Cato, Lucilius, and Ennius used such words as nouns of more general meaning, especially those ending in *io*, diminutives, inchoative verbs and those which have prepositional prefixes. These words dropped out of use in the writers of the Ciceronian and Augustan periods but were taken up again by the later writers, Celsus, Velleius, Valerius Maximus, Petronius, Quintilian, Suetonius, and others. During the Golden Age the words might have been used by the poets, who liked an unusual expression.

Almost all the words selected from Celsus will fulfill these conditions, that is, they were used by one or more of the earlier writers,

were omitted in the Golden Age or used only by the poets, and came into general use again in the Silver and later ages. These abound in prepositional prefixes and in diminutives with a large number of words of general meaning.

In addition to Vulgar Latin and words of unusual meaning I discuss in Part One the syntax, orthography, and phonetic changes in Celsus, and here I have noted a number of interesting things. For instance, Celsus regularly uses the Ablative for the Accusative of Duration; he frequently uses prepositional phrases as substitutes for cases, a usage common in Tacitus; he uses *ex* and the Ablative for the Instrumental Ablative almost as frequently as the author of the *Mulomedicina* used it four hundred years later: e.g. "rub the body with oil" (*ex oleo*), "gargle with mead" (*ex mulso*), "dilute it with wine" (*ex vino*)." He also uses very often not only *per* and the Accusative for the Instrumental Ablative, as "pierce the bone with an auger" (*per terebram*), "what has been divided with fire" (*per ignem*)," but also the double expression which is popular with Tacitus: "with force and threats" (*per vim et minis*); "by medicine or by surgery" (*per medicamenta vel ferro*)." These usages seem rather remarkable in an author who is writing from 30-40 A.D, and probably imply that they are expressions of popular speech and that the ordinary man could not use correctly all the various ablatives. There are several other things noted, such as loose sentence-structure, unusual forms of comparison, sentences beginning with *et*, confusion in the use of *vel* and *aut*, and many other irregularities: but in idiomatic use of Latin, especially of the verb, Celsus is almost as careful as Cicero.

Under orthography there is not much to note. A few vowel-changes occur; *ae* to *e*, *au* to *o* and to *u*; the letters *s* and *p* and a syllable are sometimes omitted; the conjugation of a verb and the declension of a noun or adjective are rarely changed; *is* for *iis* very often is written. An unusual construction in Celsus, perhaps, is a genuine Nominative Absolute, an expression characteristic of late Latin, occurring often in the *Mulomedicina* and the *Peregrinatio*, two of the best known works of Vulgar Latin. It may be that this Nominative Absolute in Celsus is the earliest that has been found.

It will not be amiss to cite a few of the words of peculiar meaning in Celsus. *Abscessus* implies a tumor containing pus, and is used only by

Celsus and Oribasius in this sense. *Accessio*, generally meaning an approach, in Celsus means the attack of a disease, especially of fever. *Acuo* is used to describe a boil which has come to a head. *Adcuratio* is both a Vulgar Latin word and one of special meaning; it ends in *io*, begins with a prepositional prefix, and is used by the later writers. In Cicero it means 'care,' 'pains,' 'diligence'; in Celsus it signifies a surgical treatment. *Adfectus* usually describes a state of the mind; Celsus uses it to describe the state of the body. *Aqua inter cutem* is dropsy. *Arcuatus morbus* is jaundice, from *arcus*, the rainbow. *Austerus* in Celsus is applied to wine (sour). *Alieno* is referred to some part of the body that has withered, perished, or died. *Caulis (colis)* and *naturalis* are the private parts of man and woman respectively. *Circumitus*, a circuit, means in Celsus the recurrence of a disease, in particular a fever. *Coeo* implies that pus has collected in some part of the body or that milk has curdled in the stomach. *Conceptio* means the fee the doctor receives. *Crassitudo* is referred to the thickness of liquids and not of timbers as in Caesar. *Cucurbitula* is a cupping-glass. *Circumcido* is not to 'cut around' but to circumcise. *Concitare venas* means to increase the temperature. *Alvus cita, liquida, fluens, fusa* all mean dysentery. Many words are applied to the bowels with special meanings; *movere, reddere, suppressere, ducere*. *Desido* means to 'stool.' In *eglidus* the *e* means *not* in Celsus. *Evoco* has almost the same meaning as *traho*: "draw a thorn out of the flesh with medicine," (*surculus evocetur*). *Excito* regularly means to excite the mind, the feelings, and the like, but in Celsus it is applied to the body and means to raise; "raise the hips" (*coxae paulum excitentur*); "elevate his head" (*caput altius excitandum*). *Furunculus* is not a little thief, as the word indicates, but a boil. *Inferiores partes*, the private parts, the anus. *Horror*, a heavy chill. *Latrocinor* is referred to the doctor who dissects a dead body. *Manus* means surgery. *Pinguis* is used of wine, a fig, medicine, a plaster, a diseased bone. *Morbus regius* is jaundice. *Secundae* is the afterbirth. *Spiritus*, the air we breathe, in Celsus means gas in the bowels, and also signifies existence. *Suilla* is pork which Celsus says is the lightest meat procured from domestic animals, whereas beef is the heaviest. *Venae* represent the following: redness, inflammation, temperature and pulse, urinary ducts, nerves.

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